# Student Handbook & Academic Catalog

## 2025 - 2026


Thaddeus Stevens
College of Technology

# Table of Contents

# President's Message

Dear Students,

Welcome to this year's Student Handbook and Academic Course Catalog. I am filled with genuine appreciation for each of you who has chosen to join our vibrant learning community. I deeply admire the courage it takes to pursue higher education, particularly in fields demanding the technical precision and practical mastery our programs require. We come alongside you in this journey, providing the guidance and expertise needed to develop these specialized skills.

Our century-plus history stands as a testament to a singular mission: creating opportunities and access to education that connects directly to high-demand careers while developing leaders who make a positive impact in their communities. The very fact that you are here demonstrates the grit and determination that we not only value but recognize as essential to your future success. That same perseverance that brought you through our doors will serve you well throughout your studies and into your professional life.

At our institution, we believe learning extends far beyond technical skills. Through practical, hands-on training, you will gain expertise that translates directly to family-thriving wages. But equally important is our commitment to developing upstanding citizens and community leaders. We expect all members of our community to conduct themselves in ways that foster belonging and mutual respect. Our campus thrives when everyone feels valued and included, and when we all uphold the highest standards of personal conduct.

I have seen firsthand how education creates enormous ripple effects—not just for individual students, but for families and entire communities. That is why our comprehensive support systems are designed to help you navigate challenges, seize opportunities, and make possibilities a reality. From your first day on campus until graduation, you will find resources and people dedicated to helping you succeed academically, professionally, and personally.

The pages that follow contain important information that will guide your educational journey. I encourage you to use this handbook as a resource throughout your time with us. Remember that you are now part of a legacy of students who have transformed their lives through education at Thaddeus Stevens College of Technology.

Together, we are building and strengthening relationships that will launch your future and contribute to the growth of our region. I am honored to be part of your path forward and remain committed to helping you achieve your goals.

Pedro A. Rivera II, Ed.D.

# Thaddeus Stevens College of Technology (TSCT) Overview

Thaddeus Stevens College of Technology (the "College") is a two-year technical college and has operated at its original site, 750 East King Street, Lancaster, Pennsylvania, since 1905, initially established as a trade school for indigent orphans.

Today, the College educates Pennsylvania's economically and socially disadvantaged as well as other qualified students for skilled employment in a diverse, ever-changing workforce and active citizenship. Currently serving approximately 1450 students across twenty-four programs of study, the College prioritizes students with financial need, constituting about 42% of the student body who benefit from the Stevens Grant. This grant assists with tuition, housing, meals, and provides books and tools during their enrollment. The remaining students fund their education through state and federal grants, scholarships, VA Education benefits, and loans. All students, except veterans, must be Pennsylvania residents.

Thaddeus Stevens College of Technology is Pennsylvania's sole state-owned technical college and is governed by a Board of Trustees consisting of nine members appointed by the governor.

# History of the College

The history of Thaddeus Stevens College of Technology begins with one man's vision—a vision of a world where all children, regardless of race or socioeconomic status, would be provided an education that would help them earn a living and succeed in society. Thaddeus Stevens did not live to see his vision come true, but the school he willed into being with the money he left at his death has given thousands of young people exactly what he intended—a chance. The school began almost three decades after Thaddeus Stevens died—it took that long for the claims on his estate to be settled and for the money to be sufficient to build a school. Starting in 1905, the school grew and grew... and has never stopped growing. From its first graduating class of 24 young men in 1913 to this year's parade of several hundred graduates, the school dreamed up by its founder has changed and evolved during those years. It has had 5 different names and has gone from 4 programs to well over 20, and from 6 buildings to 20. During all those years and all that growth, the founder's vision, and the mission to carry that out has never changed. Today, Thaddeus Stevens College of Technology maintains a strong connection to its founder's values and to its original mission—giving young people a chance to succeed by providing an education.

# Mission

Thaddeus Stevens College of Technology educates Pennsylvania's economically and socially disadvantaged as well as other qualified students for skilled employment in a diverse, ever-changing workforce and for full effective participation as citizens.

# Vision

Thaddeus Stevens College of Technology will be a leading provider of post-secondary technical Education that transforms lives by graduating students equipped to meet the demands of a global, competitive society.

# Core Values

Thaddeus Stevens College of Technology is committed to structuring and maintaining its daily functions around the following core values: integrity, diversity, respect, teamwork, learning and growth, and accountability.

***Integrity*** - We value the commitment to high moral/ethical standards, honesty, and fairness in teaching and learning, social engagements, and professional practices.

***Diversity*** - We value the recognition of the variety of unique individuals within our world and the interdependence upon each other, each other's culture, and the natural environment. We value the differences and respect the qualities and experiences that are different from our own.

***Respect*** – We value the unbiased consideration, treatment, and regard for the rights, values, beliefs, and property of all other people.

***Teamwork*** - We value working cooperatively and collaboratively as part of a group in which there is a shared mission and vision aligned toward a goal.

***Life-Long Learning*** – We value the relentless dedication to increasing the knowledge and competences of all individuals associated with the College. We recognize that human resources are the College's only sustainable competitive advantage.

***Accountability*** - We value the taking of responsibility for actions and the results of those actions; honoring obligations, expectations, and requirements; delivering what is promised; and owning up to shortcomings and mistakes.

# College Calendar 2025-2026

The academic year runs from August through July of the following year and is divided into two main semesters: fall and spring. Each semester lasts 17 weeks and is further divided into two subterms, each with its own course offerings and different start and end dates compared to the full 17-week courses.

The fall semester begins in August, and the spring semester begins in January. A separate summer semester spans 6 weeks, starting in June. Additional summer sessions for PreMajor and program courses are offered from May through August.

Please note that term start and end dates, refund periods, deadlines for dropping or adding courses without penalty, and deadlines for changing "I" (incomplete) grades vary by term. For full details, refer to the 2025-2026 College Calendar.

**The chart below is for the Fall 2025 Term:**

| FALL 2025 | Fall 17 Week | Fall Sub Term 1 | Fall Sub Term 2 |
|---|---|---|---|
| **Classes Start** | August 18 | August 18 | October 14 |
| **Classes End** | December 12 | October 10 | December 12 |
| **Drop/Add Ends** | August 22 | August 19 | October 15 |
| **Withdrawal Deadline** | November 26 | September 26 | November 26 |
| **Officially Enrolled** | August 25 | August 20 | October 16 |
| **Grades Due** | December 16 | October 15 | December 16 |

**The chart below is for the Spring 2026 Term:**

| SPRING 2026 | Spring 17 Week | Spring Sub Term 1 | Spring Sub Term 2 |
|---|---|---|---|
| **Classes Start** | January 12 | January 12 | March 16 |
| **Classes End** | May 13 | March 6 | May 13 |
| **Drop/Add Ends** | January 16 | January 13 | March 17 |
| **Withdrawal Deadline** | April 24 | February 20 | April 24 |
| **Officially Enrolled** | January 19 | January 14 | March 18 |
| **Grades Due** | May 18 | March 16 | May 18 |

# Campus Safety & Emergency Information

## Life-Threatening Emergencies

- **Call 911 FIRST**
- **Then, call Campus Security at: 717-391-7225**

## Emergencies

- Call **Campus Security at: 717-391-7225**

## Urgent Situations Requiring Immediate Medical Attention

- During Office Hours: Contact the **Health Services Center at: 717-299-7769**
- After Office Hours: Contact **Campus Security at: 717-391-7225**

## Non-Urgent Situations

- During Office Hours: Contact the **Health Services Center** at: **717-299-7769**
- After Office Hours: Contact Residence Life Monday-Friday 10:00 am – 9:00 pm. Visit the Residence Life online page for Residence Life Staff Information.

## Non-Emergency

When issues arise on campus that are not emergencies, contact:

- **Campus Security** available 24 hours a day / 7 days a week: 717-391-7225
- **Pennsylvania State Police**: 717-299-7650.

# 1. CODE OF CONDUCT AND YOUR RIGHTS

## 1.1 Code Of Conduct

In alignment with the principles of our founder, Thaddeus Stevens, the College is committed to upholding a Code of Conduct that promotes educational opportunity, respect for all individuals, and a safe, inclusive environment. The Code requires all members of the Thaddeus Stevens College community to act with integrity and avoid behaviors, actions, or language that demean, harass, or harm others. The College values diversity and strives to foster an environment grounded in sensitivity, understanding, and mutual respect. Racial slurs and other derogatory language are not tolerated – regardless of intent or context – even within the affected group.

To ensure a safe and productive learning environment, the Code of Conduct addresses behavior, attendance, dress standards, and the use of drugs and alcohol. The College maintains high standards to prepare you for the professional world and expects appropriate language and attire in classrooms, dining facilities, and at all College-related activities, on or off campus. Respect for College property is also expected.

You are responsible for understanding and following all College Rules and Regulations and are held accountable for violations. The Code applies to all members of the Thaddeus Stevens community. A Due Process procedure is available for those who believe disciplinary action has been taken unfairly or inconsistently.

In addition to College policies, you are accountable for violations of local, state, or federal law, which may result in legal consequences. You are expected to treat campus personnel, peers, visitors, and the Stevens community with courtesy and respect. This standard also applies to all clubs, sports teams, and student organizations.

Note that the use of College facilities, including residence hall rooms or common areas, for personal or commercial profit, is strictly prohibited. Possession or use of alcohol on campus is not allowed, regardless of age.

### 1.1.1 Code of Conduct Violations

Any violation of published rules, policies, or procedures that results in disciplinary action is considered a Code of Conduct violation. The examples below are illustrative and not exhaustive:

**Minor Violations** (NOTE: Repeated or serious instances of minor violations may be treated as major violations)

- Creating, participating in, or being present during a disturbance (e.g., excessive noise).
- Failing to follow parking regulations.
- Not fulfilling contractual obligations (e.g., proper room care).
- Smoking in unauthorized areas.
- Littering on campus.
- Violating visitation policies.
- Burning incense, candles, or other flammable materials.
- Possessing ammunition (e.g., BB's, pellets, or firearm rounds).

- Gambling in any form.
- Possessing toy or replica weapons.
- Operating a business within the residence hall or using College facilities, including rooms or common areas, for personal or commercial profit.

**Major Violations**

- Forging, altering, or misusing documents, records, keys, or IDs; falsifying information to College officials.
- Damaging, destroying, or misusing College/Commonwealth or private property.
- Tampering with safety or security equipment (e.g., fire alarms, cameras).
- Theft of property or services.
- Possessing, using, or selling alcohol on campus.
- Unauthorized entry into or use of College facilities.
- Violating civil or criminal law while on campus.
- Physical assault or confrontation.
- Violating campus safety or motor vehicle rules.
- Harassment, stalking, ridicule, or other verbal, written, or physical intimidation, whether in person or online. Disciplinary action applies if the conduct:
    - Disrupts or interferes education
    - Poses a credible threat of harm
    - Involves physically harassing conduct,
    - Violates applicable law.
- Sexual assault, sexual harassment, domestic violence, dating violence, or stalking (see additional sections for details).
- Unauthorized possession of weapons, explosives, or chemicals (e.g., firearms, bows, brass knuckles, slingshots, machetes, fireworks, or knives with blades over three inches.
  NOTE: Mace or pepper spray is permitted as allowed by state law but may only be discharge in self-defense.
- Possessing, using, or selling illegal drugs or drug paraphernalia (e.g., pipes, baggies, scales; violating the College's Drug-Free Campus Policy.
- Allowing visitation in residence halls by individuals under 18, except during move-in, Open House, or with permission from the Director of Residence Life or Vice-President of Student Services.
- Disrespectful or disruptive behavior that obstructs classes, labs, seminars, administrative functions, student conduct proceedings, or any College activity on or off campus.
- Failure to identify oneself or falsely identifying oneself, including refusal to provide ID when requested by College officials.
- Failure to comply with or show respect to College personnel acting in an official capacity.
- Engaging in behavior that recklessly or intentionally endangers others.

### 1.1.2. Due Process for Expulsion – Code of Conduct

If you face expulsion will be afforded all appropriate elements of due process, including the right to a formal hearing, which is a fundamental element of that process.

This hearing will be conducted by an internal disciplinary committee consisting of three faculty members and two students, and will be presided over by the Vice President of Academic Affairs (VPAA) or their designee. The committee's recommendation will be submitted to the President for final review.

**The following due process requirements apply:**

1. You will receive written notice of the charges.
2. You will be given adequate notice of the hearing's time and place.
3. The hearing will be private, unless the you or your parent requests it to be public.
4. You may have legal counsel present.
5. You may obtain the names of witnesses and receive copies of any statements or affidavits.
6. You may request witnesses appear in person for questioning. In most cases, witnesses will testify in person.
7. You may present their case and call witnesses in their defense.
8. A recording of the hearing will be made (video or digital). You may obtain a transcript at their own expense.
9. The hearing will be conducted as promptly to avoid undue delay.
10. You may appeal disciplinary decisions to the next highest authority, up to and including the President, who holds final authority on appeals.
11. You may waive any procedural protections at any point in the process.

### 1.1.3 Appeals Process – Code of Conduct

**Grounds for Appeal:** You may appeal a disciplinary decision on one or more of the following reasons:

- The sanctions imposed were not appropriate for the policy violation.
- A procedural error occurred that significantly affected the outcome of the case.
- New information has been discovered that was not available during the original process and could have affected the outcome.

**Appeal Procedure:** To initiate an appeal, you must submit a written appeal to the VP of Student Services by 4:30 P.M. on the second business day following the receipt of the original decision. Sanctions remain in effect during the appeal process. Appeals will be reviewed by the President or their designee, and the President's decision is final.

### 1.1.4 Committees That Hear Cases - Code of Conduct

If you violate laws or College regulations may face disciplinary sanctions based on the severity of the offense. Each case is considered individually, with sanctions ranging from warnings and suspensions for minor offenses to restitution, suspension, or expulsion for more serious misconduct.

**Disciplinary cases may be handled by the following:**

1. VP of Student Services and/or Director of Residence Life
   These administrators oversee disciplinary procedures for violations of College's rules,

including cases referred by staff or students. They may impose sanctions such as warnings, financial restitution, suspension, or recommend expulsion, in accordance with the Code of Conduct.

2. Discipline Committee
   Comprised of three faculty members and two students and convened by the Vice President of Academic Affairs (VPAA), this committee hears appeals involving major violations – such as suspensions longer than five College Days or potential expulsion.
3. Restorative Justice Board
   In cases where police are not involved, you may be referred to the Restorative Justice Board for an alternative resolution process.

The President of the College reviews all recommendations from the Discipline Committee and may accept, reject, or modify them. The President is the final authority in all cases involving suspension or expulsion.

## 1.2 Your Responsibilities

You are expected to attend classes regularly, make a conscientious effort in your academic work, and comply with all College rules and regulations. Together with administration, faculty, and staff, you share a responsibility for fostering a safe and positive learning and living environment.

You must respect the rights of others involved in the educational process and express ideas and opinions in a respectful manner, avoiding offense or slander. Do not disrupt the education of others.

## 1.3 Additional Responsibilities

You are also expected to:

- Be aware of and comply with all rules governing student behavior.
- Cooperate fully and provide relevant information in disciplinary cases.
- Recognize that all rules remain in effect unless officially waived, altered, or repealed.
- Assist College staff maintain a safe environment for everyone.
- Comply with all applicable federal, state, and local laws.
- Protect and care for College property.
- Attend classes daily unless officially excused.

## 1.4 Your Rights

You have the right to:

- access your academic records, including grades, and retain completed coursework (e.g., tests, papers, and projects);
- privacy;
- a learning and residential environment that supports studying and academic success;
- a fair hearing - formal or informal - prior to disciplinary sanctions or loss of College services;
- file a grievance or appeal decisions that affect your status or rights;

- an educational experience free from harassment, ridicule, or intimidation by any member of the College community.

Thaddeus Stevens College is committed to the principles of free speech and free expression. However, as in broader society, these rights are accompanied by a shared responsibility to exercise them respectfully and in ways that do not compromise the well-being of others.

# 2. YOUR GUIDE TO GETTING AROUND

Thad's Pad, available through our Ellucian platform, provides secure, single sign-on access to essential tools, personalized academic information and campus resources.

## 2.1 Thad's Pad Overview

Thad's Pad includes access to the following key areas:

| Category | Resources & Tools |
|---|---|
| Campus Updates | Campus Bulletin, Jones Dining Menu & Hours, Shuttle Schedule, Vehicle Policy, MAC Hours |
| Quick Links | Email (Outlook), Self-Service Portal, Canvas*, Watermark – Student Success & Engagement, IT Support, Student Handbook & Catalog, RAVE Alerts, Idea Exchange. |
| Campus Resources | Academic Support, Career Services, Counseling Services, Library, Tutor.com (24/7), College Store, Food/Clothing/Hygiene Request Form |
| Microsoft Applications | Outlook, Word, PowerPoint, Teams |

*Canvas is the College's course management platform used for accessing course materials, submitting assignments, participating in discussions, and viewing grades.

## 2.2 Programs and Campus Locations

Thaddeus Stevens College offers 24 associate degrees, four certificate programs, and a variety of short-term training options lasting from six weeks to six months. These programs are available at our main campus and four additional locations throughout Lancaster, PA.

With five locations, including our historic main campus, which features athletic facilities, residence halls, and comprehensive support services, we understand that it can take time to navigate the different spaces. To help you, we have provided detailed information about each building and location on our Campus Map online page. Below is a brief overview of our campus and its locations.

## 2.3 Thaddeus Stevens College of Technology Main Campus and Additional Locations

- ### Main Campus (Main)
  750 East King Street, Lancaster, PA 17602.
- ### Greiner Advanced Manufacturing Center (Greiner)
  599 Chesapeake Street, Lancaster, PA 17602.
- ### Thaddeus Stevens College at Greenfield Location (Greenfield)
  1812 Colonial Village Lane, Lancaster, PA 17602.

- **Thaddeus Stevens College Transportation Center (Transportation Center)**
  400 Ben Franklin Blvd, Lancaster, PA 17601.
- **Griscom Education Center (Griscom)**
  1100 East Orange Street, Lancaster, PA 17602. The Residence Hall is located on the upper floors of the building. The following services are available on the lobby level:
    - ATM
    - Counseling
    - Health Center
    - House of Champ College Store
    - Lactation Room
    - Learning Commons
    - Orange Street Cafe

## 2.4 Residence Life

Residence Halls are located on Main Campus, Griscom Education Center, and Reighard Hall at Millersville, PA. For further information, refer to the Residence Life Handbook in this document or the Residence Life online page.

## 2.5 Academic and Technology Programs

The following programs are offered at the main campus and four campus locations:

| Program | Campus/ Location | Building | Floor |
|---|---|---|---|
| Architectural Technology (ARCH) | Griscom | Griscom | 1 |
| Automotive (AUTO) | Transportation Ctr. | Transportation Ctr. | 1 |
| Business Administration (BUAD) | Griscom | Griscom | Lobby Level |
| Cabinetmaking & Wood Technology (CABM) | Main | Snyder | 1 |
| Carpentry Technology (CARP) | Main | Leonard | 1 |
| Civil Engineering Construction Technology (CIVL) | Greenfield | Greenfield | 1 |
| Collision Repair (CORT) | Transportation Ctr. | Transportation Ctr. | 1 |
| Computer & Network Systems Admin (CNSA) | Main | Kreider | 2 |
| Computer Integrated Machining (CIM) | Greiner | South | 1 |
| Computer Software Engineering Tech (CSET) | Griscom | Griscom | Lobby Level |
| Diesel (DETC) | Transportation Ctr. | Transportation Ctr. | 1 |
| Electrical Construction and Maintenance Certificate | Griscom | Griscom | Lower Level |
| Electrical Technology – 1st Year (ELEC) | Main | Snyder | 1 |
| Electrical Technology – 2nd Year (ELEC) | Main | Woolworth | 1 |
| Electro-Mechanical Technology (EMT) | Main | Kreider | 1 |
| Electronic Engineering Technology (EET) | Main | Kreider | 2 |

| | | | |
|---|---|---|---|
| Engineering CAD Technology (ECAD) | Griscom | Griscom | 1 |
| General Education Lab Classes (Gen Ed) | Griscom | Griscom | 4 |
| Graphic Communications & Printing Tech (GRAPH) | Griscom | Griscom | Lobby Level |
| Heating, Ventilation, Air Conditioning, & Refrigeration (HVACR) | Greiner | South | 1 |
| Masonry Construction Technology (MASN) | Greenfield | Greenfield | 1 |
| Mechanical Engineering Technology (MET) | Griscom | Griscom | 1 |
| Metals Fabrication & Welding (MFWT) | Greiner | North | 1 |
| Plumbing Technology (PLBG) | Main | Woolworth | 1 |
| Residential Remodeling Technology (RMDL) | Main | Snyder | 1 |
| Water & Environmental Technology (WET) | Griscom | Griscom | 4 |
| Welding Technology (WELD) | Greenfield | Greenfield | 1 |

## 2.6 Campus Services

Below is a chart outlining the services, locations, and contact phone numbers for various departments. All locations are on the main campus unless otherwise noted. The table includes programs offered at the main campus as well as at four additional campus locations.

Key: MAC = Multipurpose Activity Center; Griscom = Griscom Education Center; Schwalm = Schwalm Student Center

| Campus Service | Location | Phone Number |
|---|---|---|
| Academic Affairs | Mellor Building, 1st Floor | 299-7611 |
| Academic Center | Learning Resources Center | 391-1375 |
| Accessibility Services | Brenner Hall, 1st Floor | 299-7408 |
| Act 101/Carl Perkins Programs | Learning Resources Center | 391-7299 |
| Advancement Office | Ayres Alumni Building | 295-9666 |
| Alumni Office & Foundation | Ayres Alumni Building | 295-9666 |
| Planning, Assessment, Accountability, and Institutional Research (PAAIR) | Hartzell Building | 391-3595 |
| Athletic Director | Mellor Building, 1st Floor | 299-7752 |
| Campus Security | MAC | 391-7225 |
| Career Services | Hartzell Building | 396-7188 |
| Counseling | Brenner Hall, 1st Floor | 391-7213 |
| Dining Services | Jones Dining Hall, Schwalm, Griscom | 299-7740 |
| Diversity, Equity, and Inclusion | Mellor Building, Lower Level | 391-1365 |
| Employee Engagement (HR) | Mellor Building, Lower Level | 396-7188 |
| Admissions | Hartzell Building | 537-0641 |
| Financial Aid | Hartzell Building | 391-3510 |
| Health Services | Brenner Hall, 1st Floor | 299-7769 |
| Information | Mellor Building, 1st Floor | 299-7730 |
| Information Technology | Griscom, 4th Floor | 391-7359 |
| Library | Learning Resource Center; Library | 299-7754 |

| | | |
|---|---|---|
| Lost and Found | Mellor Building, 1st Floor | 299-7730 |
| Maintenance | Maintenance Building | 299-7782 |
| Marketing/Public Relations | Mellor Building, 1st Floor | 299-7210 |
| Parking (Business Office) | Mellor Building, 1st Floor | 391-7225 |
| Registrar/Transcripts | Hartzell Building | 391-7231 |
| Security (Main) | MAC, 1st Floor | 396-7165 |
| Security (Griscom) | Griscom, 1st Floor | 391-7225 |
| Student Payroll | Mellor Building, 1st Floor | 391-3518 |
| Student Services | Mellor Building, 1st Floor | 299-7752 |
| Veterans Information | Hartzell Building | 391-7206 |

## 2.7 Academic and Administrative Leadership

The table below lists academic and administrative contacts, roles, and duties.

Key: M = Mellor; A = Alumni House; H = Hartzell; Maint = Maintenance; LRC = Learning Resource Center; MAC = Multi-purpose Activity Center; GEC = Griscom Education Center

| Position | Name | Phone | Location | Duties |
|---|---|---|---|---|
| President | Dr. Pedro A. Rivera II | 299-7722 | M (1st floor) | Oversees operation of the college |
| Vice President of Academic Affairs | Dr. Kesha Morant Williams | 391-1364 | M (1st floor) | Provides leadership and oversight for the college's academic operations |
| Vice President of Finance & Admin | George Longridge | 391-6947 | M (1st floor) | Directs business and administrative function and facilities |
| Vice President of Student Services and Athletic Director | Dr. Chris Metzler | 299-7794 | M (1st floor) | Oversees campus life, dining, health, safety, and athletics |
| Executive Vice President of College Advancement | Pam Smith | 391-1366 | M (1st floor) | Leads and manages Government relations, career services, grants, development, the Foundation, and alumni relations |
| Executive Director of Thaddeus Stevens Foundation | Jenny Germann | 229-7776 | A | Leads and manages Foundation, new home construction project, & fundraising |
| Chief Development Officer | Mary Shaffer | 905-3727 | A | Leads fundraising and builds donor relationships |
| Chief DEI Officer & Title IX Coordinator | Dr. Marian Wilson | 391-1365 | M (Ground fl) | Ensures equitable treatment of students, faculty, and staff |
| Dean of Enrollment Services | Dr. Melissa Wisniewski | 391-7234 | H | Oversees the Offices of Admissions, Financial Aid, and Registrar |
| Dean of Student Success | Dr. Michael DeGroft | 391-3506 | M (1st floor) | Oversees student academic issues & concerns; provides asst to VPAA |
| Director of Academic Center; and PreMajor Program | Sheri Wright | 391-1375 | LRC (3rd floor) | Oversees Academic Center supports and staff and the PreMajor Program |
| Director of Act 101 & Carl Perkins Program | Dr. Valdijah Brown | 391-7299 | LRC (3rd floor) | Oversees Act 101 and the Carl D. Perkins Program |
| Director of Alumni Engagement & Development | Elizabeth Valentin | 299-7930 | A | Manages alumni relations, events, & fundraising |
| Director of Career Services | Laurie Grove | 396-7188 | H | Manages career svcs, industry engagement, career fair |
| Director of Comm & Marketing | Holly White | 299-7210 | M (1st floor) | Oversees marketing and public relations |
| Director of Employee Engagement | Heather Burky | 391-6935 | M (ground fl) | Leads Human Resources operations to support employee development, compliance, & a positive workplace culture. |
| Director of Facilities and Operations | Hector Perez | 391-7284 | Maint | Oversees facilities, renovation, fleet ops & shipping/receiving |
| Director of Financial Aid | Emily Smoker | 391-7206 | H | Oversees financial aid office and student eligibility; Veterans Affairs School Certifying Official |

| | | | | |
|---|---|---|---|---|
| Director of K-16 & Strategic Initiatives | Dr. Melissa Day | 299-7682 | M (Ground fl) | oversees K-12 STEM outreach, secondary articulation agreements, and postsecondary articulation |
| Director of Information Technology | Andrew Carson | 391-7359 | GEC (4th floor) | Oversees information technology policies, practices, and staff |
| Director of Library | Katherine Pennavaria | 299-7754 | LRC (1st floor) | Oversees library staff, services, and resources plus the College archives |
| Registrar | Amber Duh | 299-7775 | H | Manages student records, enrollment, and registration |
| Director of Residence Life | Dawan Worsley | 299-7681 | Mellor (Ground fl) | Overseas operations for Residence Life and Student Conduct |
| Director of WEDC | Valerie Hatfield | 391-3514 | H | Directs ops of Workforce & Econ Development Center |

## 2.8 College Hours of Operation

### 2.8.1 In session

During the spring and fall semesters, when college is "in session," administrative offices are open Monday through Friday, 8:00 A.M. to 4:30 P.M.

*NOTE: "In session" refers to the administrative office hours. Class schedules may vary and are determined separately.*

### 2.8.2 Summer Hours

From mid-May to mid-August, the College operates on a summer schedule: Monday through Friday, 8:00 A.M. – 4:00 P.M.

# 3. YOUR GUIDE TO ADMISSIONS, ENROLLMENT & REGISTRATION

## 3.1 Admissions

### 3.1.1 Admissions Policy

Thaddeus Stevens College offers Associate of Applied Science (AAS) degrees, certificate programs, dual enrollment, and College in the High School programs. Applicants must apply to a specific program of study, as the College does not offer an "undecided" major or the option to pursue multiple majors simultaneously. Those unsure about their choice of study should visit the Admissions Office online page to explore available options. Meeting minimum requirements does not guarantee admission, as some programs have limited seats and may place applicants on a waitlist once capacity is reached. A high school diploma or GED is required for admission.

### 3.1.2 First Time Application Procedure

To be considered for admission, all applicants must complete and submit the following:

**Online Application**

1. Submit your application by following the steps on the Applications website.
2. Applicants must have been Pennsylvania residents for at least one year prior to applying; proof of residency may be requested. Active duty military members, veterans, and their dependents are exempt.
3. New Pennsylvania residents may submit a Residency Appeal for upcoming academic year admission. Contact the Dean of Enrollment Services for the form.

**Application Fee or Fee Waiver**

- The $45 application fee is non-refundable.
- Fee Waivers are available for high school students and those affiliated with certain agencies or organizations. The College accepts the National Association for College Admission Counseling (NACAC) fee waiver for current high school students.

**High School Transcript or GED Scores**

Acceptable submission methods include:

- Email: admissions@stevenscollege.edu
- Parchment or Naviance Platform
- Mail: Thaddeus Stevens College of Technology, c/o Admissions Office, 750 E. King Street, Lancaster, PA 17602

**Evaluation Process:**

After submitting the required documents, applicants will be evaluated on factors, such as high school GPA, individual course grades, college transcripts (if applicable), and standardized test scores (if applicable). The Admissions Office will notify applicants of any next steps via email and the applicant portal. Enrollment decisions will also be communicated through the applicant portal and email.

**Optional Submissions (These will not delay the review process):**

- **SAT or ACT Scores**
  - Official scores from College Board are required if submitted.
  - Unofficial score reports may be emailed to admissions@stevenscollege.edu while you are waiting for the official scores.
- **College Transcripts**
  Official transcripts must be sent directly from previous institution to the College for review.
- **Accessibility Documentation**
  To disclose a disability and request accommodations, complete the Accommodations Request Form. Early submission is recommended as the review may take several days.

**Obtaining More Information**

You can complete the Request Information Form for further details. The Admissions team will follow up accordingly.

- Admissions Office Hours Monday through Friday: 8:00 AM – 4:30 PM
- Admissions Summer Hours: 8:00 AM – 4:00 PM
- **Email**: admissions@stevenscollege.edu
- **Phone**: (717) 299-7701 (option 2)

### 3.1.3 Readmission Procedure

- If you are a former student and wish to return, you must reapply through the Office of Admissions.

- If more than one year has passed since last attendance, you will need to submit a new application and the application fee are required.
- Applications will be reviewed by multiple departments, and additional steps may be required before an enrollment decision is made.
- If you are a current student pursuing a second degree, you must also complete the re-admit application.

The College follows a strict non-discrimination and equal opportunity policy. Admission and readmission decisions are made without regard to race, color, creed, religion, sex, national origin, ancestry, age, marital status, disability, military status, sexual orientation, gender identity, pregnancy, or any other characteristic protected by law.

### 3.1.4 Advanced Placement

The College supports your success by placing learners at the appropriate educational level. Advanced placement allows you to receive credit for prior learning and experience gained through advanced high school work, vocational/technical training, military service, or relevant work/life experience. Refer to the Credit for Prior Learning Assessment Policy for more information.

If you are interested in advanced placement, consult the College Registrar. Eligibility is based on substantial evidence of prior learning, and credit may be awarded through testing or competency assessments, as determined by the appropriate department.

NOTE: Advanced credit is not calculated into your cumulative grade point average (GPA). Only the course number, title, and credit hours are listed on the transcript, with no grade letter assigned. A maximum of 50% of the program's total requirements may be fulfilled through nontraditional credit (e.g., advanced placement or credit by exam). Credit will be granted if you are a full-time student in good standing after completing one semester, unless otherwise approved by the VPAA.

### 3.1.4 Ways to Earn Advanced Placement Credit

The following options offer advanced placement credit without a recorded grade:

- **Department Examination**
  If you have advanced skills, you may choose to take a final exam for a specific course to earn credit without enrolling.
- **Standardized Exams**
  Credit may be awarded for acceptable scores on exams such as AP, CLEP, or Excelsior.
- **Portfolio Assessment (Life/Work Experience)**
  If you are a nontraditional student, you may submit a portfolio demonstrating what you have learned through work, training, or professional experience. Faculty will assess your portfolio based on course objectives.
- **Military Training**
  Credit may be awarded for technical training completed during military service (e.g., electronics, auto mechanics).
- **Formal Apprenticeship Training**
  Credit may be granted for completing recognized apprenticeship program (e.g., machinist, plumber, electrician).

- **Articulation Agreements**
  Credit may be awarded for completing approved high school technical programs if a formal articulation agreement exists.
- **Program of Study (POS)**
  Credit can be granted through statewide Program of Study (POS) agreements recognized by the College.

### 3.1.6 PreMajor Program

If your placement evaluation indicates a need to strengthen foundational skills in reading, writing, and/or math must successfully complete PreMajor courses before being admitted to a technical program. Success in a PreMajor course is defined as earning a grade of "C" or better and meeting the required entrance test scores. If you do not meet the test score requirements, you may request a waiver based on demonstrated academic achievement at the college level.

### 3.1.7 Veterans and Military Information

If you wish to use veterans' education benefits, you must apply at US Department of Veteran Affairs (https://www.va.gov/education/how-to-apply/)

- The GI Comparison Tool (https://www.va.gov/education/gi-bill-comparison-tool/) can help you explore your benefits.
- If you were awarded post-9/11 GI Bill Statement of Benefits will show how much of your benefits you have used and how much you have left to use for your education or training.

**To determine eligibility, you must:**

- Submit a copy of your Certificate of Eligibility (COE) or Statement of Benefits to the VA Certifying Official (SCO). This document is available approximately 30 days after applying for education benefits with VA.
- Complete a VA Education Benefit Certification Form each semester to the SCO.
- Submit a Prior Education and Training Form to the SCO.
- Submit a copy of your member 4 DD214, if applicable to the SCO if you are a veteran.

**School-Certified Benefit Programs**

- Chapter 30 – Montgomery GI Bill – Active Duty
- Chapter 31 – Veteran Readiness & Employment (VR&E)
- Chapter 33 – Post 9/11 GI Bill
- Chapter 35 – Survivors & Dependents Educational Assistance
- Chapter 1606 Montgomery GI Bill – Selected Reserve (MGIB-SR)
- Chapter 1607 Reserve Education Assistance Program (REAP)

**Federal and State Benefit Programs**

- **Educational Assistance Program (EAP) & Military Family Education Program (MFEP)**
  - If you, a parent, or a spouse are in the PA National Guard, you may qualify for tuition benefits. If you are a National Guard student, you can apply for EAP. If you are a dependent or spouse of a service member, you can apply for MFEP. Applications can be submitted online at www.pheaa.org.

**Military Leave of Absence**

If you are a member of the Pennsylvania National Guard or reserve component of the Armed Forces of the United States, and are called or ordered to active duty, a leave of absence must be granted.

When released from active duty, you are entitled to and restored to the educational status previously attained without any loss of credits earned. At your discretion, the College will either refund the tuition and fees you paid or apply them as a credit toward your next semester or term after returning from military leave.

The College will offer you a 100% refund of tuition and fees or a credit for the next semester's tuition and fees. If you receive a refund and return it, the refund will be at the existing rate.

For more information, please visit the Thaddeus Steven's College website at https://www.stevenscollege.edu/admissions/veterans-and-military-information.

**VA School Certifying Official Contact**

VA School Certifying Official (SCO) Contact Information:
Emily Smoker
Phone: 717-391-7206
Email : smoker@stevenscollege.edu
Mail: 750 E King Street, Lancaster, PA 17602

### 3.1.8 Transfer Credits

If you want to transfer credits to Thaddeus Stevens College, the courses must meet the following criteria:

- The credits must be earned at a college accredited by an agency recognized by the Council for Higher Education Accreditation (CHEA).
- You must have earned a grade of "C" or higher.
- Only General Education courses are eligible for transfer. All technical or program-specific courses must be completed at Thaddeus Stevens College.
- Refer to the Transfer Credit Policy for further details.

Approved transfer courses will appear on your transcript with a "T" (transfer credit) in place of a letter grade. These credits do not affect your GPA.

To request a credit transfer:

- Have your official transcript sent directly from the previous college to the Registrar's office. The

Registrar will review your transcript and may ask for additional documentation.

- You can view approved transfer credits through your Ellucian student portal.

### 3.1.9 Early Enrollment

The Early Enrollment program is a fully immersive experience for high school seniors from partner schools with a signed Memorandum of Understanding (MOU) with Thaddeus Stevens College. During your senior year, you will attend the College full-time instead of returning to your high school. You will earn college credits in high-demand, high-wage majors.

To apply, you must complete the following steps by March 1 of their junior year:

- Complete the Early Enrollment Application online.
- Provide one teacher and one counselor recommendation
- Submit high school transcript (must have above a 2.5 GPA)
- Complete the College entrance exam.

For more information, you should contact their high school Guidance Office.

### 3.1.10 Transferring from Thaddeus Stevens to another college

If you have earned college credit can sometimes transfer those credits to other colleges/universities since Thaddeus Stevens College is accredited by Middle States. You should contact the college/university they are interested in transferring to determine what credits will transfer. For more information, please visit the "Continuing Education after Thaddeus Stevens College" online page or contact the Career Services office at careerservices@stevenscollege.edu.

## 3.2 Registration Agreement

### 3.2.1 Your Financial Responsibility

Before registering for classes at Thaddeus Stevens College of Technology, you must review and agree to the Student Financial Responsibility Agreement. By signing this agreement, you acknowledge and accept full responsibility for the payment of all tuition, fees, and other charges related to their enrollment. This includes situations where payment is expected from third parties such as financial aid, family contributions, or employer reimbursement—you are ultimately accountable for ensuring their account is paid in full.

The College allows you to register for classes without immediate payment in full as a courtesy, based on their agreement to pay by designated deadlines. By registering and accepting the terms, you enter a binding agreement with the College for the provision of educational services. Additionally, you understand that instruction methods may shift due to public health or other considerations (e.g., transitioning to online or remote learning), and such changes do not alter their financial obligations.

## 3.3 Registration

### 3.3.1 Credit Hours and Course Numbers

- **The Credit Hour**

  The credit hours for courses are expressed in semester hours. Lecture courses are designed to require approximately the same number of class hours per week as the semester hours of credit

assigned to the course. For technical courses, laboratory-based courses require three times the number of lab hours per week as the semester hours of credit. For academic or general education courses, laboratory-based courses require twice the number of lab hours per week as the semester hours of credit. Refer to the Credit Hour policy for further details.

- **Course Numbers**
  Each course at the College is assigned a code consisting of letters and numbers (e.g., WELD 125). The letters represent the subject area, while the numbers indicate the academic level. Courses numbered between 001 and 099 are developmental courses, and those numbered 100 and above are considered college-level courses.

### 3.3.2 Add/Drop General Education Courses

You can add or drop General Education courses during the first five business days of a full semester (or the first two business days of a sub-term) through Ellucian, the Registrar's Office, or your Advisor. After this period, the withdrawal process applies. To withdraw from a course, you must complete the Course Withdrawal Form and submit it to the Registrar's Office.

### 3.3.3 Maximum Credit Hours

A typical full time course load is approximately 18 credits. If you wish to enroll in more than 21 credits, you must complete the Course Overload Form prior to registration.

### 3.3.4 Change of Program Major

If you wish to change your program major, you must apply through the Admissions Office. The required form can be obtained from the Admissions Office, an academic coach, or an academic advisor. All requests are reviewed by college staff, with final approval by the Director of Admissions.

### 3.3.5 Textbooks, Tools, and Supplies

The process for obtaining textbooks depends on whether you are Stevens Grant or a Non-Stevens Grant student. For more information, visit the Textbook Purchasing Information online page.

- **Stevens Grant Students**
  - Textbooks and tools will be loaned to all Stevens Grant Students.
  - All General Education (Gen Ed) books must be returned, in good condition at the end of the semester (or at the end of their use if needed beyond one semester).
  - Books that are not returned will be charged to you, and a penalty fee will be assessed.
  - At the end of the semester, you may choose to purchase your books, at the regular purchase price based on the average value of the book.
  - You are required to purchase needed supplies for class.
  - If your withdrawal from the College, you are required to return all books and tools prior to leaving campus.
- **Non-Stevens Grant Students**
  Textbooks may be purchased:
  - Directly or online from the HACC Lancaster bookstore. Instructions for ordering the

textbooks can be found in Appendix D.

- Cengage Unlimited is an online textbook service with a yearly fee of $170, split evenly between the Fall and Spring semesters. The Fall semester charge is $85, with the remaining $85 billed in the Spring.
  - PreMajor program are charged $85 for the full year.
  - If you are in technical programs using Cengage Unlimited will receive access instructions on the first day of classes.
  - Note: If you are in MATH 126 will automatically have access to that textbook.

- **Tools**

  If you are accepted into a major are required to purchase all necessary tools and supplies. These items must be obtained by the start of the fall semester and can be found on the website under the appropriate course of study for the current semester.

### 3.3.6 Withdrawal Procedure

- **Course Withdrawal**
  - You may withdraw from a course after the Drop/Add period and up to the 14th week for full semester courses, or the end of the 6th week for 8-week Subterm courses.
  - Before withdrawing, consult with your advisor and the Office of Financial Aid to understand the potential impact on your academic progress and financial aid.
  - To officially withdraw, complete the Course Withdrawal Form, available on Thad's Pad or from the Registrar's Office.
  - A withdrawal during this period results in a grade of "W" on your transcript, which does not affect your GPA.
  - Until the Course Withdrawal Form is completed and submitted, you remain enrolled and will receive a final grade.
  - The effective date of withdrawal is the date the Registrar's Office receives the completed form with all required signatures.
  - Upon withdrawal, return any College materials or property to avoid being billed.
  - You may not withdrawal from a course in which you receive an "F" due to an academic integrity violation.
- **College Withdrawal**
  - Before withdrawing from the College, you should meet with their instructor, advisor, and the Financial Aid Office to discuss the potential impact.
  - To officially withdraw, you must complete the College Withdrawal Form, available on Thad's Pad or from the Registrar's Office.
  - You are responsible for resolving any outstanding obligations upon withdrawal (e.g., returning books and tools, paying any account balance).
- **Resident Students**
  - If you are a resident student, you must notify your Residence Hall Advisor (RHA) of their departure.
  - Room keys should be returned to the RHA. If unavailable, keys may be given to the Director of Residence Life or the Vice President of Student Services.

- If your withdrawal, you must vacate campus by 4:30 p.m. the day after notifying the College, unless other arrangements are made with the RHA.
- In certain cases, you may be required to leave immediately or by the evening of the withdrawal notification.
- The official withdrawal date is the day the signed College Withdrawal Form is received by the Registrar's Office.

# 4. YOUR GUIDE TO TUITION, FINANCIAL AID AND RELATED COSTS

## 4.1 Tuition

Thaddeus Stevens College reserves the right to change the tuition and other fees. Contact the Business Office for the most current information. Tuition and related fees are set by the College's Board of Trustees. If you have outstanding contractual obligation – including unpaid fines, residence hall charges, damages or lost property fees, bookstore balances, or unpaid tuition, housing, or meal fees – will not be permitted to enroll in the following semester.

| Semester Rates Description | Cost |
|---|---|
| Tuition – Full-Time (12+ Credits) | $4,500 |
| Tuition – 1 year PreMajor Program | $4,500 |
| Housing (Double Room) | $3,000 |
| Housing (Single Room) | $3,500 |
| 5-Day Meal Plan | $1,850 |
| 7-Day Meal Plan | $2,335 |
| Activity Fee | $25 |
| Tuition - Charge per Credit | $308 |

| Summer Session Rates Description | Cost |
|---|---|
| Tuition – Charge per Credit | $308 |
| Housing | $735 |
| 5-Day Meal Plan | $545 |
| 7-Day Meal Plan | $685 |

| Per Meal Charge | Cost |
|---|---|
| Breakfast | $5.00 |
| Lunch | $8.75 |
| Dinner | $9.00 |

| Fees and Fines | Cost |
|---|---|
| Parking Permit (annual) – optional | $15 |
| Cable TV (annual) – optional | No Cost |
| Computer Network Service | No Cost |
| Parking (First Offense – see Parking Policy) | $10 |
| Non-Sufficient Funds (Returned Check) | $33 |
| Transcript | Starting at $4.90 |
| ID Card Replacement | $5 |

## 4.2 Financial Aid

Each year, Thaddeus Stevens College of Technology's Office of Financial Aid assists more than 90 percent of students with financial aid. Financial aid is a combination of three key sources of funding: grants, scholarships, and loans.

### 4.2.1 FAFSA

The U.S. Department of Education uses the Free Application for Federal Student Aid (FAFSA) to assess your eligibility for federal financial aid, considering your income, assets, and household information, including your family's if you are a dependent.

To be eligible for grants and loans, complete the FAFSA by Thaddeus Stevens College's priority deadline of April 1. The deadline for PA State Grant eligibility is May 1st.

For more information, visit FAFSA and check Thaddeus Stevens Financial Aid online page.
You are strongly encouraged to use the IRS Data Retrieval Tool on FAFSA, which allows you and your parents to directly import your IRS tax return information.

### 4.2.2 Grants and Scholarships

- Federal Pell Grant are determined by the U.S. Department of Education and are based on demonstrated financial need and full or part-time enrollment at Thaddeus Stevens College of Technology. The College's priority deadline is April 1st of each year. If you are awarded financial aid, you must meet Satisfactory Academic Progress (SAP) standards.

- Federal Supplemental Education Opportunity Grant (FSEOG) is awarded to you if you demonstrate the greatest financial need and complete the FAFSA early. To be eligible for an FSEOG grant, the following criteria apply:
    1. You must be eligible for the Federal Pell Grant.
    2. You must meet Satisfactory Academic Progress (SAP).
    3. You should complete the FAFSA in October of the previous year. Preference is given to Pennsylvania resident students.
    4. Awards are generally $3,000 per year, and are available until funds are exhausted.
- Pennsylvania State Grant
  The Commonwealth of Pennsylvania offers grants to residents pursuing postsecondary degrees, including associate degrees. To qualify for a PA State Grant, you must complete the FAFSA by May 1 each year, meet the PA State Grant deadline of June 1, be a PA resident who graduated from a PA high school, be enrolled at least half-time (6 credits) in a two-year program, and be making Satisfactory Academic Progress. The Pennsylvania Higher Education Assistance Agency (PHEAA) will contact you via mail or email for additional information to assess your eligibility.

Special Programs through the Pennsylvania Higher Education Assistance Agency (PHEAA)
Pennsylvania Higher Education Assistance Agency (PHEAA) special programs include:

1. PA Partnerships for Access to Higher Education (PATH) Program
   If you are awarded a scholarship or grant by a PHEAA PATH (Partnerships for Access to Higher Education) Program Partner, you may be eligible for additional aid.

2. Chafee Education and Training Grant (Chafee ETG) Program
   If you are a Pennsylvania graduate student aging out of foster care and attending an eligible postsecondary institution, you may qualify for this federally funded grant program.
3. PA National Guard Educational Assistance Program (EAP) and PA National Guard Military Family Education Program (MFEP)
   In partnership with the Pennsylvania Department of Military and Veterans Affairs, PHEAA administers this tuition assistance program for you if you are a Pennsylvania National Guard member or a dependent who commits to six years of service.
4. Pennsylvania Fostering independence Tuition Waiver (FosterEd)
   You may receive a waiver for tuition and fees charged by most postsecondary institutions in the Commonwealth if you are, or were, in foster care. This waiver applies only to the remaining charges after all other gift aid (e.g., federal, state, and other scholarships or grants) have been applied to your account.

- **Thaddeus Stevens Grant**
  This grant assist students eligible to receive a Federal Pell Grant. To be eligible for the Thaddeus Stevens Grant, you must:
  - Ensure your FAFSA is processed by May 1st. Late applicants might receive a reduced award.
  - Complete all required paperwork with the Office of Financial Aid.
  - Meet Satisfactory Academic Progress (SAP) standards.
  - You must enroll in 12 or more credits and work toward your degree requirements. In some cases, if you are enrolled in fewer than 12 credits but are taking a full load of program courses according to the model schedule and have completed all general education requirements, you may be eligible on a prorated basis.
  - Complete all Pennsylvania State Grant paperwork.

  Stevens Grant covers remaining costs after Pell and PA State Grant, outside scholarships, and Student Aid Index (SAI) as determined by the FAFSA are taken into consideration. Costs can include tuition, fees, housing, and meal plan. Textbooks and tools are provided by the College to those receiving the Stevens Grant.

  **Criteria for losing the Stevens Grant:**
  The following are conditions under which you may lose their Stevens Grant:
  - Destruction of property
  - Failure to show ID (second offense)
  - Failure to clean room according to College expectations (second offense)
  - Behavior off-campus, while representing the College, that harms or damages the College's reputation (e.g., during athletic events, organizational trips, community service, or business visitations)
  - Failure to complete community service obligations
  - Visitation violation (second offense)
  - Four minor violations
  - Excessive absenteeism (not resulting in expulsion)

- Committing a major violation of the Code of Conduct while on probation

- **Thaddeus Stevens Foundation Scholarship**
  The Thaddeus Stevens Foundation awards over 50 scholarships each year. One application covers all the scholarship you qualify for. Award amounts are determined by the Foundation.

- **Other Scholarship Opportunities**
  The Financial Aid Office is pleased to provide the Scholarship Universe as an additional resource for you to apply for other scholarship opportunities. You will log in using the same login information as their self-service portal and will click on "Qualify for more scholarships." Complete the filtering questions to assist in matching scholarships. The more questions you answer, the more scholarships and/or refined matches you may receive. Scholarship Universe online page.

  For more information, contact the Office of Financial Aid at:
  717-391-3510
  FinancialAid@stevenscollege.edu
  Hartzell 105, Main Campus

### 4.2.3 Loans

A loan is a type of financial aid that is available to you and/or parents to assist in covering educational expenses that are not covered by grants and/or scholarships. There are two types of student loans: federal and private.

1. **Federal Loans**
   - **Federal Direct Subsidized Loan**
     Awarded to students with financial need. While you are in school, the U.S. Department of Education pays the interest on your loan. Loans with first disbursement on or after October 1, 2020, and before October 1, 2024 have a fee of 1.057%. Fixed interest rate of 5.50% for the loans disbursed on or after July 1, 2023 and before July 1, 2024.
   - **Federal Direct Unsubsidized loan**
     Interest accumulates while you are in school. It is also a non-need-based loan. Loans with first disbursement on or after October 1, 2020, and before October 1, 2023 have a fee of 1.057%. Fixed interest rate of 4.99% for the loans disbursed on or after July 1, 2022 and before July 1, 2023.
   - **Parent PLUS Loan**
     Your parents may qualify for a Federal Direct Parent PLUS Loan to help you pay for college. This type of loan enables your parent to borrow up to an amount equal to your total cost of attendance at Thaddeus Stevens College minus any other financial aid you receive. Loans with first disbursement on or after October 1, 2020, and before October 1, 2024, have a fee of 4.228%. Fixed interest rate of 8.05% for the loans disbursed after July 1, 2023, and before July 1, 2024.

2. **Alternative (Private) Loans**

   If you need additional funding after all federal and institutional aid has been applied, you may consider applying for an alternative (private) student loan. These loans are offered by private lenders and typically require a cosigner.

   - May have fixed or variable interest rates
   - May include variable fees
   - Multiple loan programs are available; terms vary by lender. Be a conscientious borrower and compare options carefully.

### 4.2.4 Previous Education/Training

Credit is granted for comparable prior education and training, which may shorten the training period. For more details, please contact the Registrar's Office.

## 4.3 Tuition Payment Plan

You may pay tuition in full at the start of the fall or spring semester or in three installments. To qualify for the installment plan, the first payment must be made on time. Exceptions are granted only by the Vice President for Finance and Administration.

The payment schedule is as follows:

- Fall Semester: First payment is due approximately one month before classes begin (at registration).
- Spring Semester:
  - First payment: Due on or before the first day of classes (typically one month after registration).
- Final payment: Due one month after the first day of classes.

### 4.3.1 Reduction of Charges

In exceptional cases, you may request a retroactive withdrawal (WD) or appeal for the reversal of tuition charges. In the event of withdrawal or dismissal, charges for tuition (non-sub-term), room, and meal plans will be adjusted as follows:

| Withdrawal | Reduction of Charges |
|---|---|
| 1st week of semester | 100% |
| 2nd week of semester | 80% |
| 3rd week of semester | 70% |
| 4th week of semester | 60% |
| 5th week of semester | 50% |

## 4.4 Related Costs

### 4.4.1 Damages and Loss of College Property Policy

The Business Office is responsible for billing you for any damages to or loss of College property as they occur, as well as at the conclusion of each academic year. You are required to settle these charges within 30 days from the billing date. If you fail to pay within this period, the Business Office will impose a late payment fee of $50 per month on the delinquent balance.

### 4.4.2 Your Records and Delinquent Accounts

In cases of unpaid damages or property losses, the College will place a hold on your records. This hold will prevent you from receiving your diploma until all outstanding balances (including tuition, fees, fines, or institutional) are paid in full. Additionally, any delinquent accounts will be referred to the Pennsylvania Attorney General's Office for further collection actions.

### 4.4.3 Exceptions for Veterans Affairs Funding

Thaddeus Stevens College recognizes that you may experience delays in receiving funding through the Department of Veterans Affairs under Chapters 31 or 33. In these cases, the College will not impose any penalties, including late fees, denial of access to classes, library, or institutional facilities, or require you to borrow additional funds due to the delayed disbursement of funds.

### 4.4.4. Impact of Withdrawal on Financial Aid

**Refunds to Federal Programs Following Withdrawal**

The Higher Education Amendments of 1998 (Public Law 105-244) establishes a formula to determine the amount of Federal Student Aid Funds you have earned if you stop attending classes before completing the semester for which the funds were awarded.

The Registrar's Office notifies the Office of Financial Aid of your withdrawal date. The Office of Financial Aid then recalculates the Title IV financial aid award on a prorated basis, based on the time you attended classes.

Your withdrawal date is determined by:

- The date the College receives the withdrawal form,
- The date you are dismissed from the College, or
- The date the College determines that you are no longer attending.

**Exception:** For veterans receiving veteran's benefits, the withdrawal date is the last date of attendance or the date of the last documented academically related activity.

If you attend through 60% of the semester, you are eligible to keep 100% of their aid for that payment period. The Office of Financial Aid will return funds to the Federal aid program or generate a post-withdrawal disbursement based on the Return to Title IV calculation. The Office of Financial Aid will notify you by letter of the calculation results, and the Business Office will inform you if any balance is due to the College.

**Post-Withdrawal Disbursement**

If the total amount of Title IV funds you are awarded exceeds the total amount of Title IV funds disbursed as of the date you withdraw, the difference will be treated as a post-withdrawal disbursement.

If you are eligible for a post-withdrawal disbursement, the Office of Financial Aid will award the Title IV funds. Post-withdrawal disbursements are made from available grant funds before available loan funds. The Office of Financial Aid will apply all or a portion of any grant or loan funds that make up the post-withdrawal disbursement to your outstanding account charges.

Any post-withdrawal funds not applied to your account will be disbursed directly to you within 45 days of the College determining that you have withdrawn. In the case of Parent Loans to Undergraduate Students, post-withdrawal disbursements will be made directly to the parent.

Post-withdrawal disbursements of Title IV loan funds will occur only after the College has received confirmation from you and/or parent (for Parent Loans to Undergraduate Students) that you still wish to have the loan funds disbursed.

**Processing of Financial Aid after Withdrawing from the College**

1. Submit a completed withdrawal form with all required signatures to the Registrar's Office for processing.
2. The Registrar's Office will notify the Office of Financial Aid of the withdrawal date.
3. The Business Office will provide the Office of Financial Aid with the relevant charges.
4. The Office of Financial Aid must recalculate the "Title IV" financial aid award on a pro-rated basis for the duration of time you are attended classes, using the withdrawal date to determine this length.
5. The Office of Financial Aid will return any funds to the federal aid program, which may result in a bill you owe to the college.
6. The Office of Financial Aid will inform you of the calculation results, and the Business Office will send an invoice if a balance is due.

**What Aid is included in the Calculation?**

"Title IV Funds" refers to the federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes Federal Direct Subsidized and Unsubsidized Loans, Federal Parent Loans to Undergraduate Students (PLUS), Federal Pell Grants, and Federal Supplemental Educational Opportunity Grant (FSEOG). The awards will be returned in the following order:

1. Federal Direct Unsubsidized Loan
2. Federal Direct Subsidized Loan
3. Federal Parent Loans to Undergraduate Students (PLUS)
4. Federal Pell Grant
5. Federal SEOG

Refunds for PA State Grants and private loan are calculated based on the College's refund policy, with the appropriate amounts returned to PHEAA or loan lender.

# 5. YOUR GUIDE TO ACADEMIC AND STUDENT SUPPORT SERVICES

Our mission is to provide access to higher education for those who might not otherwise have that opportunity. This mission extends beyond admissions and enrollment to encompass your entire experience at Thaddeus Stevens College. Supporting you on campus is just as crucial as helping you prepare for your arrival and after graduation.

Students, families, and mentors can be assured of comprehensive support throughout enrollment. Whether it is through learning accessibility, career pathways, or everyday needs, we have dedicated people, systems, and facilities to ensure your success.

# 5.1 Academic Advising

## 5.1.1 Academic Advising Overview

Academic Advising helps you with registration, educational planning, degree requirements, and reaching your career goals. At Thaddeus Stevens College, we use a student-centered approach to foster your academic growth and help achieve your objectives.

Faculty and staff view advisement as essential to your success. Regular meetings with your advisor help you choose the right courses, avoid registration issues, and receive guidance on academic and personal matters. If any academic or personal concerns arise, early identification ensures you get the support you need in a timely support.

Academic Advisors, assigned faculty members, assist with registration and program requirements. Contact your advisor directly for any questions.

## 5.1.2 Expectations of Academic Advising

If you participate in academic advising, you will be able to:

- Select and register for appropriate classes.
- Create an academic plan for success.
- Set academic, career, and transfer goals.
- Identify and use campus resources to support academic success.
- Contact an advisor or the Advising Office via email, phone, or in person.
    - **Pre-advising sessions** before registration reduce confusion and help explore academic goals for informed course selections.
    - **Regular sessions** with academic advisors support better course choices and provide a trusted resource for educational and personal guidance. Frequent interactions help identify academic challenges and personal issues early, ensuring timely assistance.

The advisor-student relationship depends on active participation from both you and your advisor throughout your time at the College.

## 5.1.3 What You Can Expect from Your Advisor

- Foster an interactive environment of mutual trust and open communication
- Empower you to take responsibility for your academic success
- Help you develop an educational plan and track progress toward completion
- Respond to your emails and other correspondence promptly
- Provide accurate information about curriculum, academic policies, and procedures
- Refer you to academic resources and student services when needed
- Maintain confidentiality in all interactions with you

## 5.1.4 What Your Advisor Can Expect from You

- Build a professional relationship with your advisor by being on time, prepared, and notifying your advisor if you need to reschedule
- Come prepared and actively engage in discussions
- Communicate openly about any issues affecting your academic goals and performance

- Create and follow an academic plan based on realistic self-assessment
- Take responsibility for your success by using available resources, such as the College Catalog, academic calendar, and college websites
- Keep a personal file of relevant academic materials
- Research internships and extracurricular activities that align with your career goals, using resources like the Learning Labs, Career Center, and Library

### 5.1.5 Course Planning and Advising

Faculty advisors are required to meet with their advisees at least once during each registration period before course selection.

**During this meeting:**

Advisors will evaluate your course selections to ensure that:

- The courses chosen are required for your technical program.
- The courses selected will help you meet minimum graduation requirements.
- Advisors will recommend making up any failed or incomplete courses, if the schedule allows, before graduation.

### 5.1.6 Academic Follow-Up

Advisees are required to meet with their academic advisor at least twice per semester: once at the beginning and again after midterms, to review their academic status and register for the following semester.

## 5.2 Academic Support and Services

Academic Support and Services are essential resources for your success at Thaddeus Stevens College. We offer support through free tutoring, academic coaching, and academic seminars.
If you are struggling, you are encouraged to seek assistance early. Academic success is most attainable when you recognize challenges and seek help early and consistently throughout the semester.

The Academic Center and Learning Commons, on the third floor of the Learning Resource Center (LRC) of Main Campus, provide essential academic support services, which include free tutoring, academic coaching, creating study plans, determining effective study methods, and academic seminars. We encourage you to take advantage of these resources and seek help throughout the semester. Hours of availability: Monday – Friday 8:00 A.M – 4:30 P.M.

### 5.2.1 Academic Coaching

- You are assigned an academic coach based on your program of study. The coaches offer personalized support for both academic and personal matters, with the goal of supporting the you as a whole person.
- You are encouraged to connect with your coach early and regularly. Services are available in person at the Academic Center, online videoconferencing, or by phone. No appointment is required.

**The following table below lists the Program Coaches and their corresponding programs:**

| Program | Academic Coach | Contact |
|---|---|---|
| MFWT, PLBG, WELD | Yasmine Cooper | coopery@stevenscollege.edu |
| ELEC, WET | Valdijah Brown | brownv@stevenscollege.edu |
| ARCH, CSET, ECAD, ECM, GRPH, MASN | Spencer Harper | harper@stevenscollege.edu |
| BUAD, CABM, CARP, CNSA, RMDL | Paulina Rodriguez | rodriguezp@stevenscollege.edu |
| CIVL, MET | Barbara Starin | starin@stevenscollege.edu |
| AUTO, CIM, CORT, DETC, HVACR | Michelle Williams | williamsm@stevenscollege.edu |
| EET, ELME, PreMajor | Sheri Wright | wright@stevenscollege.edu |

### 5.2.2 Tutoring Services

**Professional Tutoring (English and Math/Science Labs)**

- Walk-in tutoring is available during lab hours.
- You may submit papers for review and schedule a time to go over feedback.
- Entrance is just before the front entrance of the LRC (blue door).

| Tutors | | |
|---|---|---|
| **Name** | **Lab** | **Contact** |
| Kim Klugh | English Lab | klugh@stevenscollege.edu |
| Judith Sides | English Lab | sides@stevenscollege.edu |
| Loren Goloski | Math Lab | goloski@stevenscollege.edu |
| Barbara Starin | Math Lab | starin@stevenscollege.edu |

| Lab Hours | | | |
|---|---|---|---|
| **Lab** | **Monday-Thursday** | **Friday** | **Sunday** |
| English | 8:00a.m. – 8:00p.m. | 8:00a.m. – 2:00p.m. | 1:00p.m. – 5:00p.m. |
| Math/Physics | 8:00a.m. – 8:00p.m. | 8:00a.m. – 4:30p.m. | 1:00p.m. – 5:00p.m. |

**Peer Tutoring Support – available without an appointment**

Peer tutoring is available for some programs. You can find the schedule posted on Thad's Pad. Contact your instructor for more details.

**Tutor.com Online Tutoring 24/7**

You can access up to 10 free hours of live tutoring for General Education courses through Tutor.com, which is available on your Canvas dashboard. For technical assistance or additional hours, email the Director of Academic Center.

### 5.2.3 Act 101 Program

Thaddeus Stevens college participates in the Pennsylvania Department of Education's Act 101 program to ensure residents of the state enjoy equal opportunity to pursue higher education. If you meet certain educational and economic criteria, you may be identified as a potential Act 101 student. Act 101 staff will closely monitor your progress and provide academic, career, and personal support to help you succeed in college. Tutors are also available to help you build the

academic and technical skills needed for your program. For more information, contact the Director of the Act 101 Program.

### 5.2.4 PreMajor Support

For academic support or questions regarding the PreMajor Program, email the Program Director.

### 5.2.5 Academic Seminar

Seminars (live or voice-narrated PowerPoints) on topics like Notetaking, Time Management, Study Techniques, and Test-Taking Strategies are available.

### 5.2.6 Study Groups

You may form informal study groups using the Academic Center resources. To form a facilitated study group, contact an academic coach.

### 5.2.7 Testing Accommodations

If you have approved accommodations, you should inform your instructor and use the provided testing link at least three days before your test. For assistance, contact the Accessibility Office or stop by the office.

### 5.2.8 General Academic Appointments

For any academic support services not listed above, contact the Director of the Academic Center and PreMajor Program.

## 5.3 Student Support Services

### 5.3.1 Accessibility Services

The Office of Accessibility Services encourages all academically qualified individuals with disabilities to achieve their full potential. In compliance with the Americans with Disabilities Act, (Amendments Act of 2008), Section 504 and Section 508 of the Rehabilitation Act of 1973, the Accessibility Office provides support to help you succeed. We are here to help you develop the academic, social, and emotional skills necessary for graduation, employment, and managing life challenges.

To receive accommodation, you must register with the Accessibility Office, provide documentation of their disability, and meet with the Accessibility Coordinator.
Disability-related information is confidential and protected by laws such as Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA). This means that information can only be shared with individuals who have a legitimate need to know, or those designated by you through a signed release.

- **Testing Accommodations:** If you have approved testing accommodations through the Office is Accessibility, notify your instructor when you plan to use them. Then, use the provided testing link to schedule your test at least three days before the test date. For help with the testing link, email the Office of Accessibility or visit the office in person.
- **Disclosure:** It is your responsibility, not the parent or guardian, to disclose your disability.

Disclosure can occur at any time; however, accommodation is not retroactive.

To determine eligibility in accordance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disability Act, and the Amendment Act of 2009. For more information refer to the Office of Accessibility Services website or the Accessibility Services Policy.

### 5.3.2 Counseling Services

Counseling Services helps you develop strategies to succeed in college, work, and life. These interventions focus on strengths and encourage healthy lifestyle choices. Counseling and wellness services are located on the first floor of the Griscom Education Center.

Counseling services are available on weekdays and evenings. You can be referred by any campus member or schedule an appointment via the online scheduler, email, or phone. Counseling is free of charge and offered in a confidential setting where you can freely discuss any concerns. When appropriate, the counselor might refer you to community-based providers. You may seek counseling for a variety of issues, including depression, stress, anxiety, family and relationship difficulties, grief and loss, substance abuse, poor academic performance, disabilities, and career guidance. Additional resources and self-help information are available on Thad's Pad.

Contact information: Michelle Marmo, Mental Health Counselor; (717) 391-7213; marmo@stevenscollege.edu

### 5.3.3 Health Services

Health Services at Thaddeus Stevens College is dedicated to promoting health education, prevention, and personal responsibility within the College community, while ensuring all services are delivered with strict confidentiality. We encourage all members of the Thaddeus Stevens community to take full advantage of the services offered by the Health Services Center.

**Available Services:**

- A registered nurse is available Monday through Friday for illness and injury evaluations, medical screenings, health information, and community referrals, all at no charge to you.
- Offsite medical referrals can be arranged if needed.
- You have a confidential electronic medical record. To keep it up to date, please notify the Nurses' office immediately about any daily medications you take or any changes in your health.

**Location and Contact:**

- Melissa Meshey, RN
  Phone: (717) 299-7769
  Fax: (717) 299-7769
  Email: meshey@stevenscollege.edu
  Location: Brenner Building (1st Fl)
  Hours: Monday–Friday, 7:00 am – 3:30 pm

**Important Notes:**

- You are required to maintain medical insurance, as the College cannot be held liable for any medical costs resulting from injuries or illnesses on or off campus.

- The College assumes no responsibility beyond routine dispensary treatment for loss or injury and is not liable for any loss or injury sustained off College property.
- The College is not responsible for external medical expenses (e.g., emergency room, dental, vision, orthopedic care).
- Removable items brought to campus are not covered for loss or damage unless they are essential for College activities and proper safety equipment was being used.

**Medical Accommodation:**

- If you have been injured, have ongoing medical conditions, or are experiencing mental health challenges that impact your attendance or ability to complete coursework should notify both Health Services and the Accessibility Office.
- If you miss more than ten consecutive days due to a medical absence, you might be required to complete a medical withdrawal for that semester. Each case will be reviewed individually.

**College Responsibilities in Student Accident, Illness, or Loss:**

- The College does not assume responsibility for injuries or illnesses requiring external medical services, nor for the loss or damage of personal property unless related to College activities and safety equipment was properly used.
- In the case of any dispute regarding responsibility, a Vice President or, ultimately, the College President will make the final determination.

All medical records are kept confidential and are not released without written authorization from you. Health Services is staffed by registered nurses licensed by the Pennsylvania Board of Nursing and follows the Pennsylvania Nursing Practice Act and guidelines from the American College Health Association.

### 5.3.4 Career Services

The Career Services office supports you and graduates of Thaddeus Stevens College of Technology through career education, planning, and development. Career Services supports the mission of the College by playing a key role in your overall educational experience. We help you develop, evaluate, and put into action your career plans and opportunities. Career Services can help you in the cultivation and enhancement of skills to master job search techniques and strategies, as well as research employment opportunities. The office also provides effective and efficient service to employers in recruitment programs and activities.

**Career Services offers:**

- Resume writing
- Interviewing skills/mock interviewing
- Soft “power/employability” skills
- Social media management
- Professional presentation
- In-field Work Experience (IWE)
- Job placement
- Job/Career Fairs
- Student (on campus) Employment

- College transfer (for those interested in continuing their education after graduating)

**Student Employment**

If you are interested in on-campus employment, you can apply through the Office of Career Services, located in the Hartzell Building. You are encouraged to submit employment applications as soon as possible upon arrival at Stevens, as on-campus job opportunities are limited. Some positions may require you to obtain clearances, such as fingerprinting and child abuse history checks, before starting work.

**Finding a Job**

The College uses the College Central Network (CCN) for job and internship postings. The CCN is the exclusive job search platform for Thaddeus Stevens College students and graduates and is your best starting point for finding a job in your field. New job postings are added daily, and all listings include employer contact information. Follow the User ID and Password guidelines when registering. For more details, visit the Career Services website or stop by Hartzell 106.

### 5.3.5 Information Technology (IT) Services

The IT team is here to assist you. We offer a Help Desk ticketing system for submitting specific requests and provide helpful resources, including laptop recommendations for you, instructions for setting up your College email on your phone, steps to reset your password, and emergency alert system (RAVE). These and other resources are available on our internal IT online page.

### 5.3.6 Thad's Resource Center

Thaddeus Stevens College offers a resource center designed to address a variety of needs. This includes a clothing closet with professional attire, a food pantry, hygiene items, a nurse's office, and an accessibility office.

Our mission is to provide educational access for those who may not have that opportunity. We understand that you – whether a resident or commuter – may face resource gaps at times. Accessing these services is completely confidential. For more information, visit Thad's Resource Center.

**Food Pantry**

The College maintains a food pantry on the Main Campus accessible by request. About half of our student body are commuters and might not be able to access filling, nutritious options, and we understand the challenges of balancing intense lab and class schedules often with work or internship hours. You can submit a request to Student Services to come to Thad's Pantry, part of Thad's Resource Center in Brenner Hall, and select food items; information is kept confidential.

**Thad's Closet**

Not everyone has the clothing they need for daily activities or work responsibilities. If you are in need, the College provides Thad's Closet, located within Thad's Resource Center in Brenner Hall. This service is available exclusively to you. To schedule an appointment, simply complete the form available from Student Services. All information is kept confidential. Visit the Clothing Closet online page to complete the form to request access to Thad's Closet.

### 5.3.7 Student Emergency Assistance Fund

You may experience financial hardship due to unexpected events or emergencies. In response, and through generous donations along with the College's commitment to removing barriers to education, you can apply for assistance from the Student Emergency Assistance Fund. Please note, the fund is intended for one-time emergencies and is not meant to cover recurring expenses.

## 5.4 Library

The College library is in the Kenneth W. Schuler Learning Resources Center (LRC) and is open to all members of the College community. Staffed by professional librarians, the library provides you with the information resources needed for your technical training programs and degree completion. The library is also committed to maintaining substantial collections of supplemental and recreational materials. The library collections and resources are accessible to any member of the Stevens community with a valid, legible ID card, as well as authorized guests.

The LRC also houses the Math and English Tutoring labs, the Act 101 program and Perkins grant offices, a computer classroom, private study rooms, the Academic Center, and the Seminar Room.

### 5.4.1 Hours of Operation during the Academic Year

Monday-Thursday: 7:30 A.M. – 7:00 P.M.
Friday: 7:30 A.M. – 5:00 P.M.
Saturday and Sunday: Closed
(Holiday, interim and summer hours vary and will be posted.)

### 5.4.2 Library Resources

- **Materials**: The library lends books, DVDs, calculators, headphones, phone and laptop chargers, laptops, and webcams.
- **Renewing Items:** You can renew items by emailing staffLRC@stevenscollege.edu or by stopping by the library.
- **Course Reserves:** Faculty can place materials on reserve for class assignments requiring heavy use. You should request reserve materials at the circulation desk.
- **Online Resources:** The library subscribes to numerous online resources, accessible 24/7 at stevenscollege.libguides.com or through the library online page on Thad's Pad.
- **Reference:** Professional reference assistance is available during most operating hours. You can also request help by emailing staffLRC@stevenscollege.edu.
- **AV Equipment:** The library lends AV equipment for use in presentations.
- **Computer Lab:** Computers are equipped with Microsoft Office and specialized technical software for your use.
- **Print/Copy/Scan:** Black-and-white printing and copying are available for College-related projects free of charge. You may also scan items.
- **Study Rooms:** Group study rooms with AV equipment and whiteboards are available.
- **Lounge Areas:** Several seating and study areas are available throughout the library.
- **Vending**: A vending machine with snacks and drinks is on the main floor of the library.

- **Lockers**: Free storage lockers are available for you in the library.

## 5.5 Course Selection and Graduation Requirements

You are responsible for fulfilling both their general education and technical graduation requirements. While academic advisors assist in planning course selections, the final responsibility for meeting graduation requirements lies with you.

With your advisor's guidance, you should schedule and register for the required general education courses listed on their model schedules. Any deviations from these requirements must be approved by both the advisor and the VPAA.

## 5.6 Graduation Requirements

An Associate of Applied Science degree or a Certificate for a one-year program (lasting from August through May) is awarded upon the successful completion of the required number of credits. To satisfy the General Education course distribution requirements, you must take 25 credits. You must take at least one course in each of four subject areas: English, math, science, and humanities.

Failure in any course must be remedied by re-taking and successfully passing that course or an approved related course. If you have above a 2.00 GPA overall and in their major, you may take remaining general education course requirements at another accredited postsecondary institutions and earn a "C" or higher. You should then have an official transcript sent to the college to have the completed coursework added to your transcript. You may participate in commencement if they have less than 12 credits left in the degree requirements. **You must earn at least a 2.0 cumulative GPA overall and a 2.0 cumulative GPA in your technical major.**

You must have fulfilled all financial and contractual obligations with Thaddeus Stevens College to receive a degree. Degrees are awarded three times a year, at the conclusion of the Fall, Spring and Summer semesters.

# 6. YOUR GUIDE TO ACADEMIC POLICIES AND GRADES

## 6.1 Academic Integrity

The College believes that academic integrity is best taught and reinforced by faculty as part of the teaching and learning process. Only in cases where faculty believe both academic and disciplinary sanctions are necessary should the matter be referred to the Dean of Student Success.

### 6.1.1 Definitions and Expectations

**Academic Integrity** is the pursuit of scholarly activity in an open, honest, and responsible manner. It is the guiding principle for all academic activity at Thaddeus Stevens College, and all members of the College community are expected to act in accordance with this principle.

Consistent with this expectation, the College's Code of Conduct demands that you conduct themselves in a manner that corresponds to acceptable and mature adult standards of behavior and that complies with all College regulations and directives. You should act with personal integrity, respect other students' dignity, rights, and property, and help create and maintain an environment in which all can succeed.

Academic integrity includes a commitment not to engage in, or tolerate, acts of falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the College community and compromise the work completed by others.

To protect the rights and maintain the trust of honest students and support appropriate behavior, faculty and administrators should regularly communicate high standards of integrity and reinforce those standards by taking reasonable steps to anticipate and deter acts of dishonesty. At the beginning of each course, instructors should provide you with a statement clarifying the application of the College's academic integrity policies to that course.

**Academic honesty** - Section 7324 of the Crimes and Offenses Code of Pennsylvania makes it a third-degree misdemeanor to sell or offer for distribution any dissertation, thesis, term paper, essay, report, or other written assignment, or to sell or offer for distribution any assistance in the preparation of such assignments, for submission to an educational institution to meet the requirements for a degree, diploma, certificate, or course of study. *Assignment* is defined as a written, recorded, pictorial, artistic, or another academic task. *To prepare* is defined as to create, write, or in any way produce in whole or substantial part any such assignment.

The law does not prohibit an educational institution or members of its faculty and staff from offering instruction or instructional services as part of its curricula or programs. Neither does the law apply to the sale of certain copyrighted materials described in Section 7324.

**Plagiarism** is one or more of the following:

- Submitting an assignment claiming to be original work but which has been wholly or partially created by someone else.
- Allowing your work to be submitted by another student as if it were that student's original work.
- Presenting as your own the ideas (through paraphrases or summaries of research), organization, or the wording (through direct quotation) of another person's work without appropriate acknowledgement of the sources within the text of your work and a works cited page done according to the standards of an accepted academic documentation system (e.g., CBE, Chicago, APA, MLA).
    - Inaccurate, sloppy, or faulty documentation of sources.

**Self-Plagiarism -** Work done for one course may not be submitted for another course, even if the class is being repeated. Slightly altered work that has been resubmitted is also considered fraudulent. In some instances, instructors might allow some work from a prior course to be repurposed; if you wish to do this, you must seek approval from the instructor in advance. Under no circumstances will a complaint be considered if resubmitted work earns a different grade from the original submission.

### 6.1.2 Disciplinary Sanctions

Penalties that may be imposed for academic integrity violations include, but are not limited to, the following:

- Faculty may lower the grade or fail the assignment, lower the course grade, assign a failing

course grade, or dismiss you from the course.

- Faculty may recommend involvement from the VPAA.
- The Dean of Student Success may impose additional measures in accordance with the College's academic integrity policies.

## 6.2 Academic Standing and Satisfactory Academic Progress (SAP)

### 6.2.1 Academic Standing

- Full-Time Status: You are enrolled in at least twelve credits during a semester.
- Part-Time Status: You are enrolled in fewer than twelve credits during a semester.
- Good Academic Standing: You are in good academic standing if you:
  - Maintain a cumulative grade point average (GPA) of "C" (2.0) or higher, AND
  - Maintain a cumulative GPA of "C" (2.0) or higher in your technical majors.

### 6.2.2 Satisfactory Academic Progress (SAP)

To maintain financial aid eligibility, you must be in good academic standing and make satisfactory academic progress (SAP) in your degree or certificate program, in addition to meeting other eligibility criteria. SAP is reviewed at the end of each fall and spring semester after grades are posted. If a grade change occurs after the review, your progress will be re-evaluated.

If you fail to meet SAP, you will be initially be placed on financial aid warning. If you fail to make progress after a semester on warning, you will become ineligible for financial aid until SAP requirements are met.

You may appeal SAP ineligibility. If the appeal is granted, you will be placed on financial aid probation. However, if you fail to meet SAP requirements while on probation, you will become ineligible for financial aid. This status cannot be appealed.

### 6.2.3 SAP Requirements for Title IV Funding:

- **Quality of Progress - "Good Academic Standing"**
  - If you request aid, you must maintain a 2.0 GPA. This requirement includes PreMajor coursework.
  - If you fall below 2.0 GPA, you are placed on financial aid warning for the following semester, during which you must bring their GPA up to 2.0.
  - If you do not achieve at least a 2.0 GPA during the warning period, you lose their financial aid until you have met the requirement.
- **Quantity of Progress - "Pace of Unit Completion"**
  - You must complete at least two-thirds (67%) of all units in which they originally enroll, starting from the time of first attendance in your program. For example: If you are a first-term student who originally enrolls in 9 units, withdraws from 3, and successfully completes the remaining 6, you would meet the quantitative measure requirement because you passed at least two-thirds (67%) of the units you originally enrolled in.
  - If you request aid, you must make progress toward a degree or certificate as follows:
    - Full-time: 12 units per term and/or 24 units per year (complete average of 8 per term)

    - ¾ time: 9 units per term and/or 18 units per year (complete average of 6 per term)
    - ½ time: 6 units per term and/or 12 units per year (complete average of 4 per term)
- These grades demonstrate satisfactory course completion: A, B, C, D, T and P.
- These grades do not demonstrate successful course completion: F, I, NP, W, WIP, WF and WP.
- Incomplete grades do not count toward pace of unit completion in the term in which they are received but are evaluated the following term.
- If you fall below the cumulative minimum 67%, you will be placed on financial aid warning. You will be given the following term (semester) in which to raise your pace of unit completion above the required 67%.
- If you fail to meet the requirements during the warning period, you will lose financial aid eligibility until you have met the requirements.
- Transfer credits will be counted as successful completion in the pace calculation, but do not count in GPA calculation.
- Repeat courses count as attempted each time they are part of an enrollment. They count as completed the first time a satisfactory grade is earned for that course.

- **Quantity of Progress - "Maximum Time Frame"**

You must finish their academic program within 150% of the published length of the program. For example, if you are in a 61-credit hour Associate Degree program, you should be able to complete your degree by taking no more than 92 credits.

- **Appeals Process for SAP-Related Financial Aid Decisions**

You can appeal SAP-related financial aid decisions. This can be done by completing an appeal form and submitting it to the Office of Financial Aid. A committee will review your case to determine whether mitigating circumstances contributed to your academic progress. Mitigating circumstances may include, but are not limited to the following:

- illness or injury of the student.
- death of a close family member.
- other unforeseen extenuating circumstances.

All circumstances must be documented. You will be notified in writing of the outcome of your appeal. If your 150% appeal is approved, you will be placed on an academic plan that outlines the steps you must take to regain SAP. If you do not follow the academic plan, you will lose eligibility for financial aid in future semesters until you meet SAP.

### 6.2.4 Grievance Procedure

You are encouraged to first address their grievances informally with the person involved before pursuing a formal grievance procedure. If the issue cannot be resolved through informal discussion, you should then discuss the grievance with either the Vice President of Student Services, the Director of Residence Life, or submit the grievance through the College website.

If you are not satisfied with the outcome of the meeting with the administrator (such as the appropriate director, Dean, or Vice President), you may submit a formal grievance in writing to the President of the College.

Additionally, you may file a formal complaint with the state by visiting the Pennsylvania Department of Education at education.pa.gov.

### 6.2.5 Academic Probation

If you fail to maintain a cumulative GPA of 2.0 overall and in your major by the end of a semester, you will be placed on academic probation for the following semester. If you are dismissed from the College for the reasons outlined here, you are not eligible for probation. If you are on academic probation, and fail to raise your GPA to at least 2.0 during the probationary semester, you may be dismissed from the College.

### 6.2.6 Academic Dismissal

- Students who fail to meet the conditions of probation may be subject to dismissal.
- Course failure may prevent the student from continuing in the major and may result in dismissal from the College.
- Students who earn less than a 1.49 GPA overall or less than a 1.49 GPA in their major during a semester may be dismissed without a period of probation.

### 6.2.7 Appeal of Academic Dismissal

Upon the decision to dismiss you for academic reasons, the Dean of Student Success will send written and electronic notifications to you and relevant College representatives. You have five working days to appeal the decision. If no appeal is received within that time frame, the dismissal stands.

To appeal, you must submit the appeal in writing (email is preferred) to the Dean of Student Success within five business days of the dismissal date.

Once the Dean of Student Success has decided, you may appeal to the VPAA who may refer the case to an Academic Appeals Committee or uphold the original decision. In the case of a referral, the Committee will consist of three full-time faculty members and two students, with one faculty member appointed as the chair. Committee members must have no vested interest in the case.

The Academic Appeals Committee will review the evidence and conduct a hearing within 72 hours of your request. A verbatim record (e.g., a tape recording) of the hearing will be made and remain College property. You may request a copy of the proceedings at your own expense. Within 24 hours of the hearing, the Committee will submit a written recommendation to the Vice President for Academic Affairs.

The Vice President will render a final decision within 24 hours of receiving the recommendation and inform all parties in writing.

### 6.2.8 Administrative Dismissal

Thaddeus Stevens College reserves the right to terminate your enrollment if, in the College's judgment, further association is not in the best interest of you or the College. The following are potential grounds for administrative dismissal:

- Neglecting financial obligations
- Failing to follow College policies and procedures

- Failing to meet academic requirements
- Exhibiting persistent lack of effort or interest
- Failing to maintain academic integrity

## 6.3 Grading and Assessment

### 6.3.1 Attendance

Since regular attendance is important for success at Stevens, a strict attendance policy is maintained. Each faculty member keeps their own attendance records. You are required to comply with the attendance policy specific to each class as well as with the related stipulations cited below.

The following are recognized as legitimate excuses to miss class:

- death in the immediate family
- hospitalization
- illness verified by a doctor's excuses
- circumstances verified by a campus counselor or Office of Accessibility

College activities as approved by one of the following:

- Vice President of Student Services,
- Dean of Student Success,
- Vice President for Academic Affairs

Although you may be excused for an absence, you are still responsible for completing all of work and requirements for each course. In situations where you reach ten or more excused absences, you may be asked to withdraw from the course, receive an incomplete grade, or be dismissed from the College.

If you have two unexcused absences from a course, you will receive a warning letter. Once you have five unexcused absences from a course, you are liable for dismissal from the class and/or the College.

For courses that meet once a week, you will receive a warning letter after one unexcused absence and are liable for dismissal after three unexcused absences.
For courses that are offered remotely, this policy will be applied in a different manner. For synchronous courses, the attendance policy is as stated above. For asynchronous or hybrid courses, the attendance policy is stated below.

If you fail to engage, turn in work, participate in real-time instruction, or are not responding to communication, the faculty must report you to the Dean of Student Success. The Dean will issue a warning letter to you. Once a warning letter is issued and you still fail to engage, you are liable for dismissal from the course and/or the College. The College will attempt to communicate with you and provide resources and support needed to avoid dismissal.

You who are dismissed from a course or the college for attendance can appeal that dismissal. You should appeal in writing to the Dean of Student Success within three days of the dismissal. During the appeals process you should continue to attend classes until a decision has been made. If the

appeal is denied, you have the option to further pursue their appeal to the Vice President of Academic Affairs.

### 6.3.2 Non-Attendance

- As of the census date, if you are reported by the instructor as never having attended a class meeting—or, for online courses, never having completed an academic activity—you will be de-registered from that course.
- If you fail to attend all your registered courses in a semester, you will be administratively withdrawn from the College.

### 6.3.3 Tracking Progress in Canvas

Throughout the term, you will have the opportunity to track your progress by regularly checking your grades in Canvas. Each course can have its own schedule for when assignments and grades are updated, as outlined by their instructor in the course syllabus, but Canvas will always provide you with access to their current progress. At the end of the semester, you can view their final grades through self-service, which will include all coursework completed during the term. For your privacy and in compliance with federal law, grades cannot be shared over the phone, ensuring academic information stays secure.

### 6.3.4. Grading Scale

**The College's grading scale is:**

| GRADE | POINT ALLOCATION | % SCALE |
|---|---|---|
| A | 4.0 | 93 and above |
| A- | 3.7 | 90-92 |
| B+ | 3.3 | 87-89 |
| B | 3.0 | 83-86 |
| B- | 2.7 | 80-82 |
| C+ | 2.3 | 77-79 |
| C | 2.0 | 73-76 |
| C- | 1.7 | 70-72 |
| D+ | 1.3 | 67-69 |
| D | 1.0 | 63-66 |
| D- | 0.7 | 60-62 |
| F | 0.0 | 59 and below |
| I | 0.0 | Incomplete |
| W | 0.0 | Withdrawal |
| WS | 0.0 | Withdrawal from School |
| WP | 0.0 | Withdrawal from Class While Passing |
| WF | 0.0 | Withdrawal from Class While Failing |

### 6.3.5 Grading Policy

Each academic year is divided into two semesters. At the end of each semester, instructors submit

one grade through Canvas, the College's learning management system. All scholastic information is recorded on your transcript.

- **Grade and Attendance Tracking Policy**
  - Instructors are required to maintain grades and attendance in accordance with the College's grading and attendance policy to ensure transparency regarding your progress throughout the semester. You should generally be able to track your progress in Canvas during the semester.
  - Instructors are encouraged to inform you when grades for assignments are updated throughout the term.
  - All grades (A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F, I, W) are recorded.
  - The GPA is calculated by multiplying the number of credits per course by the grade point value, then dividing the total grade points by the total number of credits attempted. Transfer courses are not included in the GPA calculation.

### 6.3.6 Midterm Grades

Faculty are required to submit midterm grades for all students in both the fall and spring semesters.

### 6.3.7 Finals Week

Final exams are given in most technical and general education courses during the last week of the semester; the regular class schedule is followed. If you have questions about your final exams or special final projects, you should discuss them with the instructor of the class.

### 6.3.8 Incomplete Grades

If, for reasons beyond your control, you cannot complete a course within the prescribed time, the final grade may be deferred with approval from both the instructor and the Dean of Student Success. If granted, an "I" (Incomplete) will appear on your transcript and will not be calculated into your GPA. The required work must be completed by the end of the fourth week of the following semester.

This option should not be used to delay a failing grade. To request an incomplete, you must obtain a form from your academic advisor and get the instructor's approval. If approved, the instructor must submit the completed form to the Dean of Student Success for final approval. All steps must be completed before the end of the semester.

If the "I" grade is not resolved by the fourth week of the following semester, it will automatically change to an "F" unless an alternative arrangement is made with approval from both the instructor and the Dean of Student Success.

### 6.3.9 General Course Repeat Policy

You may repeat a course to earn a higher or passing grade. Only the highest grade earned will be used in the GPA calculation. The term "repeat" refers to retaking a course for which you have already received a grade, including a "W" (Withdrawal).

- The **first attempt** is the first time you attempt a course for a grade.
- The **second attempt** is the second time you attempt a course for a grade and is considered the first repeat.

This policy is designed to ensure you fully comprehend the material and to maintain the academic integrity of the College.

- **Developmental Courses**
  You are required to complete developmental coursework may repeat a developmental course only once. This includes taking the course at another institution. If you are unable to successfully pass a developmental course within two attempts, you will not be allowed to continue into your program of study.
  - A passing grade in developmental courses is a **C (70) or better**.
  - To pass certain programs, you must also pass specified admissions entrance exams.
  - If you earn a **B (83-86)** or higher in developmental courses, you may have the admissions exam requirement waived.
  - You can appeal this policy to the Dean of Student Success if you have extenuating circumstances that prevent you from adhering to it.

- **College-Level Courses**
  You may repeat college-level courses to improve your grade, including cases where you have received a "W." However, you may repeat a course only **twice**.
  - If you are unable to successfully complete courses required for graduation, you should discuss alternate graduation plans with your academic advisor.
  - As with developmental courses, you can appeal this policy to the Dean of Student Success if extenuating circumstances prevent you from following the policy.

### 6.3.10 Dean's List

If you have a GPA of 3.25 or higher (and no incomplete grades) you are placed on the Dean's List at the end of the semester. At graduation, the following honors are awarded:

- Summa cum laude: 3.95 – 4.00
- Magna cum laude: 3.65 – 3.94
- Cum laude: 3.35 – 3.64
- Honors: 3.25 – 3.34

### 6.3.11 Appeal of Grade

- If you wish to appeal a grade, you must do so within 30 days after the final grade is posted.
- You must first meet with the faculty member to discuss the grievance.
- If you and faculty member do not reach a satisfactory resolution, you may appeal to the Dean of Student Success.
- To appeal to the Dean of Student Success, you must submit a written request, including a summary of the grievance. The Dean will review the appeal and decide within three working days.

- If you wish to pursue the matter further, you may appeal to the Vice President for Academic Affairs. The decision of the Vice President is final.

# 7. YOUR GUIDE TO BEING A WELL-ROUNDED STUDENT

You will find many activities ongoing during both the Spring and Fall semesters at Thaddeus Stevens College. These can include gardening nights, game nights, bonfires, s'mores making, haunted houses, decorating competitions, and scavenger hunts. Dozens of clubs and groups host events to help you connect with others and get involved on campus.

To find information about upcoming events, you can visit my.stevenscollege.edu and click "Campus bulletin" at the top. That space will always feature the current week's events! The internal TVs are also updated weekly with upcoming events, and an ongoing calendar is available at my.stevenscollege.edu in the top right corner by clicking on the calendar icon.

As part of the education and learning process, you are encouraged to be physically active, therefore, enriching personal growth through healthy lifestyle practices.

## 7.1 Multipurpose Activity Center (MAC)

You can use the Multi-Purpose Activity Center (MAC) for free – it is open to all students, faculty, and staff. You must be registered and actively attending classes to be eligible to use the Fitness Center.

The 61,000 square foot Multipurpose Activity Center (MAC) features a spacious gymnasium with a primary basketball arena, flanked by courts on either side. The MAC also includes two racquetball courts, an elevated 110-meter track, coaching offices, a training center, locker room facilities, and seating for approximately 2,000. Complementing this high-profile facility is the adjoining Stauffer gymnasium with a state-of-the-art cardio theater and an array of free weights with a separate circuit training area and several cardiovascular apparatuses.

- **You are not permitted to bring guests or anyone not registered at the College into the MAC.**
- **You must swipe your ID card each time you enter the building.**
- Rules for the MAC are posted throughout the building. If MAC rules are broken, disciplinary sanctions will be imposed.

The MAC is available to you on the following days/times during the fall and spring semesters:

| Day | Regular Hours | Summer/Holiday Hours |
|---|---|---|
| Monday – Thursday | 8:00 A.M. – 10:00 P.M. | 8:00 A.M. – 7:00 P.M. |
| Friday | 8:00 A.M. – 9:00 P.M. | 8:00 A.M. – 7:00 P.M. |
| Saturday – Sunday | 8:00 A.M. – 4:00 P.M. | 8:00 A.M – 4:00 P.M. |

## 7.2 Athletics

Thaddeus Stevens College offers an athletic program that includes football, men's and women's cross-country, men's basketball, men's wrestling, and men's and women's track and field. Teams complete against other colleges, junior varsity teams, and junior/community colleges in the mid-Atlantic region.

The basketball, cross-country, wrestling, and track and field programs are affiliated with the National

Junior College Athletic Association (NJCAA), allowing athletes to compete in regional and national competitions upon meeting qualifying standards. These teams also participate in the Eastern Pennsylvania Athletic Conference (EPAC), Region XIX of the NJCAA. The football team is a member of the Seaboard Conference.

**Intercollegiate Athletics**

More than 100 student-athletes participate in five intercollegiate teams, competing across the commonwealth and tri-state area. Our student-athletes excel both on the field and in the classroom. Beyond graduation, our athletic programs provide invaluable skills that translate to success in the workplace and life.

## 7.3 Intramurals

The intramural program is one of the most popular activities at the College. Its goal is to offer a wide variety of sports and recreational activities. Among the activities included: dodgeball, basketball, and volleyball. Play-offs are held in all sports, with a trophy and party for the winners. Student ID cards are needed each night of participation in any intramural sport.

Students' guests are not permitted to participate in intramural sports. Student athletes who are practicing or competing on an intercollegiate athletic team may participate in an intramural sport only during the team's off-season.

Fall Semester – Dodgeball and Pickleball

Spring Semester – Basketball and Volleyball

For more information on intramural sports, please email Tony Miller.

## 7.4 Extracurricular Activities

### 7.4.1 Commuting Students

Commuting students are encouraged to participate in the various committees and activities offered by Thaddeus Stevens College. You are encouraged to take advantage of the College's library, tutoring, counseling, and medical services.

### 7.4.2 Student Clubs and Organizations

Thaddeus Stevens College strongly supports student organizations that provide meaningful experiences to enhance your cultural, social, physical, and spiritual development.

All student organizations are open to the entire student body and are designed to encourage participation without exclusion. You can view the list of student clubs on the Student Organizations website.

**Student Groups**

Student groups meet casually on a regular basis. If you are interested in joining or starting a group, you should contact Student Services. Active student groups are:

- **The Table**: A weekly Bible study group – meal provided.
- **Trading Card Game (TCG) Group**: Students gather weekly for trading card games and board games.
- **Starting a new club or organization:** The Student Government Association reviews and

recommends clubs and organizations.

**Existing Student Clubs & Organizations:**

- **American Design Drafting Association (ADDA):** The student chapter of the American Design Drafting Association aims to disseminate technical information for improving the science of graphic communications and design, to initiate and encourage a continued program of education for self-improvement and progress, and to foster a spirit of fellowship among its members.
- **Architecture Club:** The Architecture Club was formed to cultivate a vibrant community of passionate individuals who share a common love for architecture. It celebrates the art and science of architecture, embracing its capacity to shape the world. The club thrives on creativity, collaboration, and a shared passion for transforming the built environment.
- **Black Student Union (BSU):** The BSU encourages Black students and students of all races and ethnicities to engage in cultural enrichment and intellectual growth centered on African American culture, lifestyle, and history. BSU raises awareness of issues impacting the African American experience.
- **Boxing Club:** Open to anyone wishing to learn boxing techniques, this club offers an excellent cardio workout. Students practice offensive and defensive skills using bag gloves, heavy bags, hand wraps, and other equipment. Sparring is strictly prohibited.
- **E-sports:** E-sports offers competitive tournaments and an online community where students can view tournament broadcasts, share clips from their favorite games, and chat with other College gamers.
- **Joint Residence Hall Council:** This organization promotes the general welfare of residence life at Thaddeus Stevens College, facilitates communication between students, residence hall personnel, and administration, and provides experience in democratic government.
- **Latino Scholars:** A representative body of Hispanic students providing a supportive social and academic network while celebrating their cultural heritage on campus.
- **Outdoors Club:** This club is dedicated to outdoor activities like hiking, fishing, kayaking, and camping. It also participates in environmental or conservation service projects each year.
- **Phi Theta Kappa:** Invitation to join the Beta Nu Delta Chapter of the Phi Theta Kappa honor society is extended to full-time students maintaining a GPA of 3.5 or higher. The organization focuses on scholarship, leadership, service, and fellowship.
- **Power Source:** A faith-based student group that meets regularly to fellowship, share faith-based experiences, and support each other.
- **SkillsUSA Competition:** A competition that starts regionally and advances to state and national levels, allowing students to test their skills against peers and industry standards. It empowers students to become world-class workers and leaders, enhancing the careers of students,

instructors, and industry professionals. Every major at Thaddeus Stevens College is represented in one or more of the nearly 100 competition areas.

- **Society of Manufacturing Engineers (SME):** A student chapter 228 of the national organization dedicated to inspiring, preparing, and supporting students for the advancement of manufacturing.
- **Spectrum LGBTQ+ Alliance**: The Spectrum LGBTQ+ Alliance provides a safe and supportive community for Thaddeus Stevens College students who identify as lesbian, gay, bisexual, trans, queer, or questioning.
- **Student Government Association (SGA):** A representative body voicing student opinions concerning cultural and academic life and sharing proportionately in the development of College policy.
- **Tech Phi Tech Fraternity:** A fraternity founded in 1986 to encourage and sponsor the development of collegiate activities, community service, brotherhood, and scholarship.
- **Women in Technology and Trades:** A blend of social activities, learning opportunities, and both formal and informal support networks provided for women on campus.
- **Yearbook Staff:** An opportunity for students to participate in the Thaddeus Stevens College yearbook production.
- **Young Lion Mentoring:** A supportive club that nurtures students' potential. Through mentorship, guidance, and empowerment, the club aims to cultivate leadership skills, personal development, and academic excellence among its members. By providing a platform for mentorship relationships to flourish, the club strives to inspire confidence, resilience, and ambition in young adults as they navigate their educational, professional, and personal journeys.

### 7.4.3. Student Governance

- **Student Government Association**: Members are elected each fall. This representative body provides a forum for students to express their opinions on campus, social, cultural, and academic life. It also serves as a communication link between students, faculty, and administration.
- **Residence Hall Council**: The Residence Hall Council facilitates communication among students, residence hall staff, and administration. Each building has its own council, and any resident can attend meetings within their building. Members of each building will elect officers responsible for creating and implementing minor policies related to residence hall life. Each council plays an important role in organizing activities for residents.
- The councils meet as the Joint Residence Hall Council to discuss common issues. Each residence hall is responsible for hosting at least one joint meeting during the combined fall/spring semester sessions.

### 7.4.4 Schwalm Student Center

The Schwalm Student Center is one of the focal points of student activity on the Main Campus. Completely renovated by students, faculty, and alumni, the center has three floors and houses The Campus Grille, student lounge areas, and student government meeting hall and offices. Outside of the Schwalm Student Center is a student-built brick fire pit.

# 8. YOUR GUIDE TO SECURITY AND CAMPUS SERVICES

## 8.1 Campus Security and Security Services

### 8.1.1 Overview of Security on Campus

Thaddeus Stevens College Campus Security (Security Guards) protect students, employees, the campus, and residence halls from intruders and theft. Please treat them with courtesy, as they work for you. Be ready to show your ID if requested. The Vice President for Student Services supervises security personnel.

### 8.1.2 Security Services Five Components

1. Personnel who frequently tour all areas of the main campus for safety purposes.
2. Responsibility for security at Main Campus, Griscom Education Center, Greiner Advanced Manufacturing Center, Transportation Center, and Thaddeus Stevens College at Greenfield Center.
3. Personnel stationed at times in each residence hall for safety purposes.
4. Personnel stationed in the Multipurpose Activity Center (MAC) and Griscom Education Center Lobby.
5. Personnel conducting motor patrols between Main Campus, Griscom Education Center, Greiner Advanced Manufacturing Center, Transportation Center, and Thaddeus Stevens College at Greenfield Center.

## 8.2 Campus Emergency Communications

The College has an emergency notification system (RAVE) that can email and text information about a College emergency directly to a cell number. On Thad's Pad there is an application that allows enrolled students to indicate how they wish to be contacted in an emergency.

## 8.3 Crime Statistics

### 8.3.1 Campus Crime Report and Safety Data

In accordance with the Student Right-to-Know Campus Security Act, College and University Security Information Act (Act 73 of 1988), Campus Sex Crimes Prevention Act (CSCPA), and the Clery Act, a Crime Statistics report is available online to provide both current and prospective students, faculty, and staff with information pertinent to security measures and crime statistics at Thaddeus Stevens College of Technology.

For additional information, the Thaddeus Stevens College Crime Statistics website provides:

- Daily Crime and Fire Log
- Annual Security Report (ASR)

- Annual Crime Statistics

The Annual Security Report (ASR) and Crime Statistics brochure is also available in the Office of Finance and Administration, Mellor Building, 1st Floor.

## 8.4 Campus Fire Safety Report

The Fire Safety Report contains fire safety policies and procedures related to on-campus student housing and statistics for fires that occurred in those facilities.

### 8.4.1 Fire Safety Education and Training

You are required to watch a Fire Safety video. In addition, all resident students are required to attend a safety workshop conducted by the residence hall director. Residence hall directors have received additional fire safety training and will share relevant information with you regarding living in a campus residence hall.

### 8.4.2 Fire Safety Improvements

The campus Fire Safety Report is reviewed regularly and changes made when appropriate. Any recommendations should be reported to Security.

### 8.4.3 Fire Alarm Procedures

- If a fire occurs sound the building fire alarm by pulling the red alarm pull box and, if possible, call 911 then Security at 717-391-7225.
- Once a fire alarm has been sounded, evacuate immediately using the nearest fire exit door or stairwell.
    - Do not use elevators because they can become inoperative.
    - If you can, assist disabled persons in exiting the building. Disabled persons who cannot use stairs should wait in the stairwell until security or firefighters arrive.
    - Notify security officers or fire authorities of the location of any disabled persons remaining in the building.
    - Notify security officers or firefighters if they suspect that someone is trapped inside.
- The fire alarm might not sound continuously. Even if the alarm stops, continue the evacuation.
    - Warn others who try to enter the building after the alarm stops.
    - Evacuate to at least 500 feet from the building and out of the way of emergency personnel.
    - Do not return to the building until instructed to do so by security officers or other authorized personnel.
- When a fire alarm has been sounded or a fire is reported to Security, the security officer will initiate the notification procedures for contacting appropriate personnel.

## 8.5 Student ID

### 8.5.1 Identification and Verification policy

A student ID card is issued to you and serves as your official college identification. It is required for access to the Greiner Campus and MAC facilities. If your ID card is lost or stolen, contact Security

located at the MAC.

### 8.5.2 ID Card Funds

- Funds can be loaded onto your student ID by the cardholder and used for meals. Deposits can be made at the Business Office located on the first floor of the Mellor Building.
- Non-Stevens Grant resident students who do NOT want to upgrade to a 7-Day meal plan OR non-Stevens Grant commuter students who do NOT want a 5-day meal plan can purchase meals by depositing funds onto their student ID card.
- ID Card Funds can be added by completing the bottom portion of the Meal Plan Contract and returning it to Accounts Receivable.

## 8.6 Food Services and Meal Plans

### 8.6.1 Jones Dining Hall

Thaddeus Stevens College features a spacious dining hall that offers meals seven days a week. It operates while you are on campus, with adjusted hours during academic breaks. The dining hall is closed during official college recesses and throughout the summer, except for college-level programs running from late June to early August.

Jones Dining Hall offers a variety of breakfast, lunch, and dinner options, including a salad buffet, pizza, a vegetarian venue, and a selection of toppings. You can choose from a range of hot and cold beverages, with the option to dine in or take out.

Visit Thad's Pad for the dining menu, as wells as the latest schedule and hours.

**In addition to Jones Dining Hall, students can also enjoy meals and snacks at:**

- **Campus Grille**
  The Campus Grille is on the first floor of the Schwalm Student Center located on the Main Campus.
- **Orange Street Café**
  The Orange Street Café is located adjacent to the main lobby of our Griscom Education Center location.
- **Vending**
  Vending machines with beverages and snacks are located around the campus.

### 8.6.2 Meal Plans

- Please refer to the Accessibility Office for dietary accommodations.
- Refer to the Dining Services website for more information.

- **Stevens Grant Students**
  Assigned a meal plan based on their housing status.
  - Resident Student = 7-Day Meal Plan
  - Commuter Student = 5-Day Meal Plan
- **Non-Grant Resident Students**

- Non-Grant Resident Students are assigned a 5-Day Meal Plan with the option to increase to a 7-Day Meal Plan.
- Students with a Meal Plan will have their student ID Cards activated for use in the Dining Hall and Cafes.

- **Non-Grant Commuter Students**
  - Non-Grant Commuter Students have the option to purchase a 5-day meal plan.

## 8.7 Information Technology

Your College-issued email address (example@stevenscollege.edu) is where you will receive important information about student life and communicate with instructors. Please activate your email and check it frequently.

While you can use an alternate email, we do not recommend auto forwarding your stevenscollege.edu emails to it, as all official communications are sent there. You are responsible for staying updated on all information, deadlines, and requirements.

If you have questions or issues with your College email account, contact

**WiFi**

Wireless Availability is available to all staff, faculty, students, and authorized visitors with laptops or mobile devices capable of wireless connectivity. Those connected to Thaddeus Stevens College will be able to access Internet and email.

## 8.8 PSECU

Thaddeus Stevens College has partnered with PSECU (Pennsylvania State Employees Credit Union) since 2015 to provide on-campus banking services and Financial Education to the campus community. PSECU offers full-service banking including:

- Free checking accounts to you, faculty/staff, Alumni, and their families with no money needed to open their membership, no minimum balance, and no monthly service fees
- Competitive loan rates for your borrowing needs

There is a PSECU machine located at Griscom Education Center and over 70,000 other free ATMs you can use as a member, as well as up to $20 a month in ATM rebates. PSECU also offers free online and mobile banking, free checks, and your credit score monthly for free.

## 8.9 Student Emergency Assistance Fund

The Student Emergency Assistance Fund is a partnership between the Office of the President and the Offices of Advancement, Student Success, Student Services, and Academic Affairs. Through generous donors and the commitment of the College, funds are provided to support if you experience financial hardship due to an emergency or unanticipated event. These funds are not intended for reoccurring costs that you may have. For more information, visit the Emergency Assistance Fund online page.

# 9. YOUR GUIDE TO COLLEGE POLICIES AND PROCEDURES

## 9.1 Vaping/Tobacco

Tobacco is defined as any tobacco product, including but not limited to chewing tobacco, snuff,

cigarettes, cigars, cigarillos, pipes, and bidis. Electronic cigarettes (e-cigarettes) are also restricted to the designated areas.

Vaping and tobacco use are prohibited on all College property, including College-owned and operated vehicles, with the following exceptions:

**Designated Areas for Tobacco Use:**

- **Gazebos:**
  - Griscom Education Center entrance
  - Main campus between Herrington and Armstrong Halls
  - Main campus between Leonard and Woolworth Buildings
  - Main campus between Kreider and Leonard Buildings
- **Smoking Areas:**
  - Hartzell Parking Lot
  - Main campus along Bulldog Drive
  - Greenfield Parking Lot
  - Greiner Campus
- **Disciplinary Sanctions:**
  Violations of this policy will typically result in the following sanctions, although the College reserves the right to impose other actions:
  - Verbal warning
  - Written warning and probation
  - Loss of privilege
  - Suspension from residence halls and/or the College

### 9.1.1 Multi-Stemmed Smoking Devices

Hookahs (also known as waterpipes, narghile, shisha, or qualia), multi-stemmed devices for smoking flavored tobacco, are not permitted on the College campus. If found in possession of a hookah or similar device, you will be asked to remove it from the residence hall and campus. Failure to comply is considered a major violation of the College's Code of Conduct.

## 9.2 Alcohol Policy

### 9.2.1 Non-Alcoholic Beer or Associated Beverages

Non-alcoholic beer and similar beverages are not permitted on any campus locations or in the residence halls. If found with these items, you will be asked to dispose of or remove them. Failure to comply will be considered a major violation of the College's Code of Conduct.

### 9.2.2 Beer Bottles, Liquor Bottles, Or Similar Containers

The College is a dry campus committed to maintaining an alcohol-free learning environment. The College also receives funding to support drug and alcohol education through seminars and workshops. To uphold this standard, empty beer bottles, liquor bottles, or similar containers are not allowed as decorative items anywhere on campus. Anyone found in possession of these items will be asked to dispose of or remove them. Failure to comply may result in disciplinary action,

ranging from probation to temporary suspension from the residence halls.

### 9.2.3 Disciplinary Sanctions

The Student Services Office, with substantial input from members of the College community and with the approval of the President, will determine the charges leading to exclusion (suspension or expulsion) from the College and/or residence halls. Typically, charges resulting in exclusion are major violations indicated under Violations of the Code of Conduct.

- **Suspension**
  Suspension is defined as exclusion from the College and/or residence halls for one to five consecutive College days. Suspensions are issued by the Vice President of Student Services or the Director of Residence Life.

  Before a suspension of one to five days is enforced, you will be informed of the reasons for the suspension and given an opportunity to respond to the College official initiating the action. However, prior notice may not be given if College personnel determine that the health, safety, or welfare of the College community is at risk.

  The President of the College will be notified in writing when a suspension occurs. You will also receive written notice of the suspension. Your parents, guardians, or sponsors may be informed in writing as well, but only after consultation with you.
- **Residence Hall Suspension**
  During a suspension from the residence hall, you may attend classes but you are not permitted in any residence hall. You must leave campus by 6:00 P.M. or 20 minutes after their last class ends each day of the suspension.
- **College Suspension**
  While you are suspended from the College, you are not permitted on any College property and may not participate in any College-sanctioned extracurricular activities, regardless of where they take place (e.g., away sporting events, student organization activities).
- **Interim Suspension**
  The Vice President of Student Services or Director of Residence Life can impose an interim suspension and/or loss of privileges on any student whose presence on campus poses a threat to their own safety, welfare, or well-being, or to others in the College community. If the suspension exceeds ten College Days, a disciplinary hearing will be scheduled within five College Days.
  - **Second offense of the College's Code of Conduct within one year following a suspension**
    A violation may result in a five day suspension from the residence halls with a recommendation for expulsion. If you are a resident and remain enrolled, you may be suspended from the residence halls for the remainder of the semester and placed on probation. You will also be held to the same conditions as a commuting student.

    If you are a commuter and remain enrolled, you will remain on probation for the rest of the semester and are not permitted on campus after 6:00 P.M. during this period.

In both cases, your return to the residence halls or campus after 6:00 P.M. at the start of the next semester will be subject to review and approval by the Vice President of Student Services and the Director of Residence Life.

## 9.3 Drug-Free Campus Policy

***Please note that a full version of the Drug Use Policy can be found in Appendix A. The summary provided here highlight key points, and we encourage you to review the complete policy for detailed information, including disciplinary action.***

**Policy Purpose**

Thaddeus Stevens College of Technology values its students and reputation and is committed to accident prevention and loss protection. The College recognizes that substance abuse negatively affects student health and jeopardizes its resources. Moreover, substance abuse undermines the College's ability to operate effectively and efficiently. In its commitment to safeguard the safety, health, and well-being of students and employees, protect College assets, and deter the illegal use of drugs (including alcohol, controlled substances, inhalants, and other substances used as alternatives to illicit drugs), the College has established this Drug-Free Campus Policy (the "Policy").

**Scope and Applicability**

Compliance with this Policy is a continuous condition of enrollment and applies to all full-time and part-time students at the College in the following instances:

- while on College premises.
- during all College activities, regardless of location.
- during lunch and other breaks.
- while operating tools or machinery on any campus or at a College-sponsored event.
- while operating a motor vehicle on College property.
- while attending College-sponsored events.
- while conducting business on behalf of, or representing, the College.

### 9.3.1 Student Responsibilities and Duties

Failure to comply with these duties constitutes a violation of the Policy.

- **Be Fit for Duty:** Report to campus, class, or activities in a fit-for-duty capacity, free from the influence of drugs (including medical marijuana), alcohol, controlled substances, inhalants, or other substances that pose a threat to campus safety.
- **Understand the Policy:** Review and understand this Policy, the negative effects of drug, alcohol, controlled substance, and inhalant use/misuse, and the College's testing policy.
- **Seek Help Voluntarily:** Proactively seek help if struggling with substance use issues before they affect your college experience.
- **Drug Law Convictions:** Notify the College's DIR within five calendar days if you are convicted of a drug law violation or if a plea of nolo contendere is entered.
- **Medication Use:**

- If prescribed medication or taking over-the-counter drugs, you should consult your prescribing physician to determine whether the medication may pose a threat to campus safety.
- If you are in safety-sensitive program, you are prohibited from being on campus under the influence of medical marijuana.
- Notify the DIR about any medications that could impact your fitness-for-duty or pose a direct threat to campus safety. You are not required to disclose your medical condition, only that you are using medication that may affect campus safety.

- **Physician's Statement:** Provide a copy of your physician's statement verifying your ability to safely perform the essential functions of your program before participating in campus- or program-related activities.
- **Impact of Prescription Drugs on Safety:** If a prescription or over-the-counter drug poses a direct threat to campus safety, the College will determine whether you may remain on campus or attend class. The College may seek a second opinion from a medical professional of its choice.
- **Support Drug Education:** Participate in and support College-sponsored drug education programs.
- **Cooperate with Investigations:** Cooperate with investigations and support the College's efforts to address drug, alcohol, or substance abuse among students.
- **Medication Storage:** All medications must be kept in their original containers while on campus.

### 9.3.2 Prohibited Conduct

**Illegal Drugs:** It is a violation of College Policy for anyone associated with the College to sell, manufacture, distribute, dispense, use, possess, purchase, obtain, transfer, convey, be under the influence of, or test positive for controlled substances in violation of federal or state law (or to attempt any of the above actions).

**Controlled substance** is defined in this Policy as a drug that federal or state law has declared to be illegal for sale or use, even if it is dispensed under a physician's prescription.

**Prescription Drugs:** Prescription medications are not prohibited under this Policy if taken as directed in standard dosages and/or under a physician's prescription, provided the medication does not pose a threat to campus safety or render the student unfit for duty. However, the abuse of prescription drugs is strictly prohibited. This includes, but is not limited to, exceeding the prescribed dosage, using medication for unintended purposes, or using medication prescribed to another individual. You are also prohibited from using or possessing medical marijuana on campus.

**Over-the-Counter Drugs**: Over the counter medication are not prohibited when taken in the standard dosage as directed, provided that does not render you unfit to perform the essential functions of your program of study or negatively impact campus safety. The College prohibits you from being under the influence of mood-altering over-the-counter drugs that are used contrary to the product's labeling (i.e., misuse of over-the-counter drugs) while subject to the terms of this

Policy.

**Alcohol**: The College prohibits students from illegally using, possessing, selling, buying, distributing, or attempting to distribute or manufacture alcohol, as well as being involved in any illegal alcohol-related conduct. This includes, but is not limited to, driving under the influence and underage drinking violations, while subject to the terms of this Policy.
For purposes of this Policy, the term "alcohol" includes any intoxicating agent found in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols, and includes any medication or food containing alcohol. Additionally, the College prohibits students from the following alcohol-related conduct while subject to this policy:

- Possessing opened containers of alcohol.
- Using, consuming, distributing, manufacturing, dispensing, or being under the influence of alcohol.
- Operating a motor vehicle on campus property while under the influence of alcohol.
- Using or consuming alcohol within four hours before arriving on campus.
- Participating in any campus-related activities or program-related coursework, or operating tools or machinery on College property while under the influence of alcohol.
- Consuming alcohol within eight hours following an accident and/or before a post- accident test, as specified in the Policy.

**Inhalants and Legal Substances**: You are prohibited from arriving on campus property, participating in campus-related activities, or program-related coursework, or operating tools or machinery while under the influence of, or using, any inhalant.
An "**inhalant**" is defined as glue, paint, aerosol, anesthetic, cleaning agent, solvent, or other substance that, when inhaled or ingested, causes intoxication, euphoria, excitement, exhilaration, stupefaction, or dulling of the senses and that contains chemicals including, but not limited to, chemicals such as toluene, xylene, hexane, acetone, methylene chloride, methanol, Freon(s), benzene, (iso) amyl nitrate, (iso) butyl nitrite, (iso) propyl nitrite, N-butyl nitrite, butane, propane, fluorocarbon, hydrocarbons, ethyl chloride, nitrous oxide, halothane, tetrachloroethylene, trichloroethane, or trichloroethylene.

The College also recognizes that certain legal substances can be used in place of illicit substances to create similar effects (intoxication, euphoria, excitement, exhilaration, stupefaction, and/or dulling of the senses). You are prohibited from arriving on campus property, participating in campus-related activities or program-related coursework, or operating tools or machinery while under the influence of, or using, any legal substance for these purposes.

The College uses the concept of "**reasonable suspicion**" to determine if a Policy violation has occurred involving the use of inhalants or other legal substances. Reasonable suspicion can be based on, but is not limited to, the following observations:

- **Physical symptoms** of being under the influence, such as bad breath, substance odor, runny nose, watery eyes, drowsiness, unconsciousness, slurred speech, poor muscle control, mood swings, irritability, nausea, hallucinations, facial rashes, constant sniffing or coughing,

irritability, anger, agitation, uncontrolled laughter, nausea, loss of appetite, vomiting, hallucinations, convulsions, facial rashes and blisters, constant sniffing and coughing, slurred speech, depressed reflexes, rapid movement of the eyeballs, dilated pupils, etc.

- **Pattern of abnormal conduct** or erratic behavior, or deteriorating performance in College activities, linked to the use of inhalants or legal substances.
- **Identification in a criminal investigation** concerning the illegal use of inhalants or legal substances.
- **Admission by the student** of illegal use of inhalants or legal substances.
- **Repeated safety violations** or risks of injury or property damage, linked to inhalant or substance misuse.
- **Reports from credible sources** about the misuse of inhalants or legal substances, which have been independently corroborated.
- **Possession of drug paraphernalia:** Students are prohibited from bringing paraphernalia related to the illegal use of drugs onto College property.

### 9.3.3 Student Drug and Alcohol Testing

**Random Drug Testing**

If you are enrolled in safety-sensitive programs, you are required to participate in random drug testing. Selections for testing will be made using computer-generated random numbers. If you are selected for random drug testing, you must agree to be tested within twelve hours; otherwise, the test results will be recorded as positive and treated according to the Policy.

**Reasonable Suspicion**

The College may require you to submit to drug and/or alcohol testing based on reasonable suspicion. The decision will be made in judgment of the College, using information available at the time. Testing will be required if you are deemed unfit for duty, or if there is a reasonable suspicion that you are using drugs or alcohol in violation of the College's Policy, or if you exhibit the physical signs and symptoms of substance abuse. The evidence for reasonable suspicion will be drawn from specific, observable facts and reasonable inferences, which may include, but is not limited to, the following:

1. Observable behavior, such as direct observation of drug or alcohol abuse, possession, distribution, or physical symptoms of being under the influence (e.g., slurred speech, dilated pupils, odor of alcohol or marijuana, mood swings, etc.). Observation may also include indications of chronic or withdrawal effects from the illegal use of drugs.
2. A pattern of abnormal conduct, violent or erratic behavior, or deteriorating performance in College-related activities that appears to be related to substance abuse or misuse.
3. Your identification as the focus of a criminal investigation into unauthorized drug possession, use, or trafficking.
4. You admit that you were involved in the illegal use of drugs or the misuse of alcohol.
5. Repeated violations of the College's Code of Conduct, safety, or other rules that pose a

substantial risk of physical injury or property damage and appear to be related to substance abuse or misuse that violates the College's Policy.

6. A report of drug or alcohol use from reliable, credible sources, which has been independently corroborated.
7. Evidence of tampering with a drug or alcohol test.
8. Your failure to report an accident.

## 9.4 Searches

***You are required to sign a Search and Seizure Form to acknowledge their understanding of the Search and Seizure Policy. This form can be found in Appendix E.***

1. **College Property Searches.** The College provides housing, lockers, storage areas, equipment, briefcases, computers, desks, or workstations for student use in performing essential by tasks related to their programs of study. All these items and areas, along with data or materials generated using them, remain the property of the College. The College reserves the right to search any College property at any time, with or without notice or cause. You should not expect privacy on College-owned property. The College also use other investigative methods when there is reasonable suspicion of violations of the Drug-Free Campus Policy violations. Refusal to cooperate with a search of College property will be considered a violation of this Policy.
2. **Personal Property Searches.** The College reserves the right to conduct a search of a student's personal property if a Policy violation is suspected. This search may include personal items brought onto College property such as wallets, purses, bags, briefcases, toolboxes, food and beverage containers, or vehicles. By entering College property and remaining enrolled, you give consent to such searches. All searches will be conducted in the presence of two College-trained representatives and you. Refusal to cooperate with a search of personal property will be considered a violation of this Policy.

## 9.5 Title IX – Sex Discrimination in Education

Thaddeus Stevens College of Technology does not discriminate on the basis of sex and is committed to providing a safe and healthy educational and workplace environment for all members of the College community. All students and employees have a right to be treated with dignity and respect. These rights extend to application for admission, classrooms, workplaces, residences, and the entire College environment. Accordingly, the College prohibits discrimination, unlawful harassment, including sexual harassment, and any other victimization of individuals based on actual or perceived traits or characteristics. This section outlines the College's policy and procedures regarding sex discrimination in education as prohibited by Title IX of the Education Amendments of 1972, and the Pennsylvania Human Relations Act, including sexual harassment.

Title IX states that "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Consistent with Title IX, the College prohibits all forms of sex discrimination as defined by Title IX and Title IX regulations, and as explained

in detail in this Policy.

The College is committed to protecting, maintaining, and encouraging freedom of inquiry in teaching, service, and research. However, raising issues of academic freedom and freedom of expression will not automatically excuse behavior that constitutes a violation of this Policy or the law. The College will balance the enforcement of this Policy with freedom of speech and academic freedom concerns.

The procedures, including the grievance process, set forth in this Policy apply when an employee, student (or applicant for admission) is either a Complainant or Respondent (as the terms are defined in this Policy).

The complete policy and procedures for resolution can be found on the college's website under Title IX linked from the homepage.

1. **Title IX Coordinator**: The person responsible for monitoring compliance with all aspects of this Policy. Accordingly, the Title IX Coordinator must be informed of all reports and complaints raising Title IX issues, even if the report or complaint was initially filed with another individual or office, or if the investigation will be conducted by another individual or office.

   The Title IX Coordinator's contact information is:
   Marian V. Wilson, PhD
   750 East King Street Lancaster, PA 17602
   Chief Diversity, Equity and Inclusion Officer and Title IX Coordinator
   wilson@stevenscollege.edu
   (717) 391-1365
   The above contact information shall be provided to all current students and employees of the College, applicants for admission and employment with the College, and must be prominently displayed on the College's website.

2. **The Title IX Coordinator has designated deputy Coordinators** to provide assistance with the Title IX process. The Deputy Coordinators are:

   **Heather Burky**
   Director of Employee Engagement
   750 East King Street, Lancaster, PA 17602
   burky@stevenscollege.edu
   (717) 391-6935

   **Dr. Chris Metzler**
   Vice President of Student Services
   750 East King Street, Lancaster, PA 17602
   metzler@stevenscollege.edu
   (717) 299-7794

   **Mr. Dawan Worsley**
   Director of Residence Life
   750 East King Street, Lancaster, PA 17602

Worsley@stevenscollege.edu
717-299-7681

**Ms. Rosanna Wakley**
Engagement, Equity, and Inclusion
750 East King Street, Lancaster, PA 17602
wakley@stevenscollege.edu
717-391-3553

In addition to the procedures in this Policy for reporting to the Title IX Coordinator, individuals may also contact the Office for Civil Rights (OCR):

**U.S. Department of Education**
Office for Civil Rights
Lyndon Baines Johnson Department of Education Bldg., 400 Maryland
Avenue SW Washington, DC 20202-1100
Phone: (800) 421-3481
Fax: (202) 453-6012
TDD: (800) 877-8339
OCR@ed.gov

## 9.6 Non Discrimination Policy

Thaddeus Stevens College of Technology (the "College") does not discriminate in its educational programs or employment practices based on race, color, national origin, sex, sexual orientation, gender identity, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification.

The College's Nondiscrimination Policy establishes guidelines in accordance with the College's obligations under federal and state nondiscrimination laws. The purpose of this Policy provides for the orderly resolution of complaints of discrimination or harassment on the basis of race, color, ancestry or national origin, sex, sexual orientation, gender, gender identity, physical or mental disability, religion, age (as applicable), status as a protected veteran, or any other legally protected classification. Such discrimination and harassment are strictly prohibited by the College.

This Policy applies when:
1. Any employee or student who witnesses or has been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, gender identity, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification;
2. Any former employee or student who witnesses or has been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, gender identity, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification, if the conduct took place during the time of employment or enrollment at the College;
3. Any employee or student who has knowledge of discrimination or harassment on the basis that apply to the College, against another employee or student, in order to report such offenses; and, 4. All third parties with whom the College has an educational or business relationship who witnesses or has

been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, gender identity, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification, and/or any other category protected that applies to the Thaddeus Stevens College of Technology when the conduct has a reasonable connection to the College.

This Policy applies to all College programs and activities, including, but not limited to, discrimination and harassment in instruction, grading, athletics, College housing, programs and activities, and College employment when:
1. The alleged violations occur on College owned, leased, or otherwise controlled property, while participating in College affiliated programs;
2. The alleged violations occur off campus, and the conduct impairs, interferes with, or obstructs any College activity or the mission, processes, and functions of the College;

This policy also applies to any off-campus behavior that affects a substantial College interest. A substantial College interest is:
1. Any situation where a student's conduct may present a danger or threat to the health or safety of others;
2. Any situation that significantly impinges upon the rights, property, or achievements of others;
3. Any situation that is detrimental to the educational mission and/or interests of the College.
This policy shall not be construed or applied to restrict academic freedom, nor shall it be construed to restrict constitutionally protected expression.

**Procedures for Reporting Discrimination**
Students and employees who believe that they are being harassed or discriminated against regarding any of the above, should contact one of the following:

1. Office of Diversity, Equity, and Inclusion (717)-391-1365

2. Office of Human Resources (717) 391-6935

3. Office of the Dean of Students (717) 299-7794

The procedures are intended to protect the rights of the reporting party, as well as the party whom a complaint of harassment or discrimination is reported against. Each complaint will be investigated, and appropriate action will be taken.

Reports under this policy should be brought as soon as possible after the alleged conduct occurs. Prompt reporting will enable the College to investigate the facts, determine the issues, and provide an appropriate remedy or personnel action.

5.1 – Reporting and Filing Complaints of Discrimination or Harassment Any incident of unlawful discrimination or harassment in violation of this Policy must be reported to the appropriate College official, Dean of Students, Human Resources or Diversity, Equity, and Inclusion. Forms and procedures for reporting these complaints of discrimination or harassment are available in each of these offices or online at the TSCT Portal.

5.2 – Additional Information on Reporting Confidential Employees: Professional licensed counselors, health services professional, and pastoral counselors who provide health, and counseling services to members of the College community are not permitted to report any information without the victim's permission.

**Timing -** There is no time limit for reporting prohibited conduct to the College under this Policy; however, the College's ability to respond may diminish over time, as evidence may erode, memories may fade, and Respondents may no longer be affiliated with the College.

**Office for Civil Rights** - In addition to the procedures in this Policy for reporting, individuals may also contact the Office for Civil Rights (OCR):

U.S. Department of Education
Office for Civil Rights
Lyndon Baines Johnson Department of Education Bldg.
400 Maryland Avenue,
SW Washington, DC 20202-1100
Telephone: 800-421-3481; Fax: 202-453-6012; TDD: 800-877-8339; Email: OCR@ed.gov

## 9.7 Information Technology Acceptable Use

Access to the College's computing/information network facilities and resources is a privilege granted solely to Thaddeus Stevens College faculty, staff, registered students, and those with special accounts. All users of the computing/information network's facilities must act responsibly and maintain the integrity of these resources. The College reserves the right to limit, restrict, or extend computing/information network privileges and access to its resources.

Those who do not abide by the policies listed below are subject to suspension of computer privileges and possible referral to the appropriate judicial process.

Office of Student Services should be notified about potential violations of laws and policies governing information use, intellectual property rights, or copyrights. Computer and Network Services should be notified about potential loopholes in the security of its computer systems and information networks as well as in the investigation of misuse or abuse. Should the security of a computer system information network be threatened, suspected user files may be examined.

• An individual may use only the network ID assigned to them, unless multiple accesses have been authorized for the ID.
• An individual may not try in any way to obtain a password for another user's network ID.
• A user may not attempt to disguise the identity of the account or machine they are using.
• No individual may use the College's network resources to gain or attempt to gain unauthorized access to remote computers.
• No individual may carry out any act which might seriously impact the operation of computers, terminals, peripherals, or networks. Such acts include, but are not limited to: tampering with components of a local area network (LAN) or the high-speed backbone network, blocking

communication lines, or interfering with the operational readiness of a computer.
• No person shall knowingly run or install on any College computer systems, or give to another, a program which could result in damage to a file, computer system, or information network, and/or the reproduction of itself. Such programs include, but are not limited to, the classes of programs known as computer viruses, Trojan horses, bitminers, and worms.
• No person shall attempt to circumvent data protection schemes or uncover security loopholes.
• All persons shall abide by the terms of all software licensing agreements and copyright laws. Unauthorized copying of copyrighted software is prohibited, unless the College has a site license specifically allowing the copying of that software. Furthermore, the copying of site- licensed software for distribution to persons other than Thaddeus Stevens College faculty, staff, and students, or the copying of site-licensed software for use at locations not covered under the terms of the license agreement, is prohibited.
• No individual may perform deliberate acts which are wasteful of computer and/or information network resources or which unfairly monopolize resources to the exclusion of others. These acts include, but are not limited to, sending mass mailings or chain letters, creating unnecessary multiple jobs or processes, obtaining unnecessary output, uploading music and large video files, excessive printing, or creating unnecessary network traffic.

The following types of information or software cannot be placed on any College-owned computer system:
• That which infringes upon the rights of another person; 97 Volume 2 July 11, 2024
• That which may injure someone else and/or lead to a lawsuit or criminal charges; e.g., pirated software, destructive software, pornographic materials, or libelous statements; and
• That which consists of any advertisements or commercial enterprises.

No person should use the College's computer resources to engage in conduct otherwise prohibited by the College's Code of Conduct.

No person should use the College's computer/information network resources to monitor another user's data communications, or to read, copy, change, or delete another user's files or software, without permission of the owner.

Use of the College's servers, workstations, or information networks must be related to a Thaddeus Stevens College course, research project, work-related activity, departmental activity, or for interpersonal communications. Use of these resources for personal or financial gain is prohibited. If the non-business usage of computer/information services results in a direct cost to the College for any reason, it is the individual's responsibility to reimburse the College.

Existing College policies such as the Sexual Harassment Policy will be enforced as they relate to a violation of the Computer Resources Acceptable Use Policy. Potential violators may also be subject to criminal prosecution under federal or state law, and should expect the College to pursue such action.

Consequences: Violation of one or more of these published policies will result in a loss of access to the

College computing/information network systems with possible referral to the appropriate judicial process.

Student Email: Your College-issued email address (example@stevenscollege.edu) is where we send you important information regarding student life at the College as well as the communication platform for you and your instructors. It is important that you activate your College-issued student email and check it frequently.

Student Experience: https://experience.elluciancloud.com/tscot is your "one-stop shop" online tool. It is a secured site that introduces single-sign-on access to Thaddeus Stevens College applications, including your College-issued student email. It also offers a variety of customized information and resources to help students track their academic progress and get the most out of their experience at the College. This tool is known as Thad's Pad. We will regularly send you announcements and reminders essential to your success at Thaddeus Stevens College. Sometimes, we also mail important information to your street address or call your listed phone number.
Social Media: Social media sites can be effective tools for exchanging information. Thaddeus Stevens College embraces and strives to uphold the freedoms of expression and speech guaranteed by the First Amendment of the U.S. Constitution and the Pennsylvania state 98 Constitution. However, any online behavior that violates the College Code of Conduct which is brought to the attention of any College official may be treated as any other violation of the Code. The College reserves the right to adjudicate such violations when the incident involves endangering the lives of others or self, or incidents of an extreme nature.

Students should remember that any information or behavior exhibited or shared on social media sites could affect membership in clubs, organizations, and campus employment as well as internships and jobs outside of Thaddeus Stevens College.

For more information, refer to the Information Technology Acceptable Use Policy.

## 9.8 Jones Dining Hall Code of Conduct

Thaddeus Stevens College is dedicated to the personal and social development of its students, which is reflected in our Code of Conduct concerning behavior on campus. The Jones Dining Hall, located on the Main Campus, serves as a central gathering place for students, faculty, and prospective students and families. It is essential that you recognize the impact of your behavior has on peers, staff, and visitors. As a disciplined community, you are expected to contribute to the common good by demonstrating respectful behavior.
In keeping with that philosophy, the following regulations apply to the Jones Dining Hall. All Stevens students should:

- Refrain from using lewd, indecent, or obscene language that disrupts the dining environment.
- Treat each other, dining service staff, security, and other personnel with respect and courtesy.
- Avoid loud or unruly behavior that detracts from a pleasant dining experience.
- Understand that physical confrontations are not tolerated.

- Return dining trays, utensils, and trash to the appropriate areas.
- Avoid "jumping the line" in any circumstances.
- Refrain from making derogatory comments about dining hall personnel regarding food quality or service.
- Treat dining hall furnishings with respect.
- Present a valid College-issued ID upon entering the dining facility. A meal pass is issued by the Student Services Office once per semester; after that, you must purchase a replacement card.

Failure to comply with these regulations can result in disciplinary action:

a. **First offense**: Written reprimand with possible loss of dining hall privileges for a set period.
b. **Second offense**: Loss of dining hall privileges for a set period, possible suspension from the College, or a combination of both.

## 9.9 Mobile Device Policy

You are permitted to carry phones, tablets, or other devices. However, mobile communication devices may only be used in the classroom with the instructor's permission. If you are found on campus processing, using, or selling illegal drugs, in addition to the disciplinary actions outlined in the College's Code of Conduct, you will forfeit the privilege of carrying mobile communication devices on any Thaddeus Stevens College location.

## 9.10 Dress Code

An important part of the College's mission is to prepare you for success in the workforce upon graduation. To provide a professional and safe environment for all students, the following dress code will be enforced. In creating this code, four key factors were considered: safety, health, sanitation, and consideration for fellow students, faculty, and staff.

- No undergarments should be visible or displayed as outer garments.
- No clothing with lewd, indecent, or obscene language or images.
- In lab areas: adhere to all safety standards specific to the individual program, such as wearing safety glasses, long pants, steel-toed boots, etc.

Programs of study may implement additional dress codes, such as requiring professional or distinctive clothing that aligns with the expectations of the industry or workforce.

**Typical Sanctions**

First Offense: Verbal Warning
Second Offense: Progressive Discipline

## 9.11 Hygiene Policy

As members of the campus community, you are expected to maintain good personal hygiene to help reduce the spread of illness and disease. You will be asked to address any hygiene or odor related issues.

**Typical sanction for violations of the hygiene policy**:

First offense: Verbal warning
Second offense – Progressive discipline

# Thaddeus Stevens College of Technology 2025-2026 Student Handbook & Academic Catalog

## Student Handbook Acknowledgment Form

This College handbook and catalog has been compiled to inform students about the policies of Thaddeus Stevens College of Technology (hereafter "Thaddeus Stevens College" or "the College"). The handbook/catalog is available on the website of Thaddeus Stevens College. After reviewing the handbook/catalog, please sign below to acknowledge receipt of the handbook/catalog and your understanding of the policies as stated in this document. The President of the College reserves the right to amend the handbook/catalog as needed.

The provisions and conditions of this handbook/catalog are not to be considered an irrevocable contract between the student and Thaddeus Stevens College. The College reserves the right to change any fees, requirements, and/ or regulations at any time during the student's term of enrollment. Approved curriculum changes may be implemented the semester following approval, provided they do not impact the student unfairly.

**Key Policies:**

- Stevens is a dry campus and strives to promote an alcohol and drug-free learning environment.
- Reasonable suspicion of substance or alcohol use could lead to a student being required to take a drug test after enrollment. Random testing may also occur during the academic year.
- Students are expected to attend every class. Any student absent for five days is subject to dismissal.

**Please sign and return this page to the Thaddeus Stevens College Student Services Office after you have read the handbook/catalog.**

Date: _____

Print Student's Name: _____

Student's Signature: _____

*The College will not discriminate in its educational programs or employment practices based on race, color, national origin, sex, sexual orientation, gender identity, disability, age, religion, ancestry, union membership, or any other legally protected classification. Announcement of this policy is in accordance with state and federal laws, including Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, and the American Disabilities Act of 1991.*

*Employees and participants who have an inquiry or complaint of harassment or discrimination or who need information about accommodations for persons with disabilities, should contact Marian V. Wilson, Ph.D. Chief Diversity, Equity and Inclusion Officer for Thaddeus Stevens College of Technology, 750 East King Street, Lancaster, PA 17602. (717) 391-1365*

## Appendix A – Drug-Free Campus Policy

1. **Policy Purpose**

   Thaddeus Stevens College of Technology values its students and reputation and is committed to accident prevention and loss protection. The College recognizes that substance abuse negatively affects student health and jeopardizes its resources. Moreover, substance abuse undermines the College's ability to operate effectively and efficiently. In its commitment to safeguard the safety, health, and well-being of students and employees, protect College assets, and deter the illegal use of drugs (including alcohol, controlled substances, inhalants, and other substances used as alternatives to illicit drugs), the College has established this Drug-Free Campus Policy (the "Policy").

2. **Scope and Applicability**

   Compliance with this Policy is a continuous condition of enrollment and applies to all full-time and part-time students at the College in the following instances:

   - while on College premises.
   - during all College activities, regardless of location.
   - during lunch and other breaks.
   - while operating tools or machinery on any campus or at a College-sponsored event.
   - while operating a motor vehicle on College property.
   - while attending College-sponsored events.
   - while conducting business on behalf of, or representing, the College.

3. **Contract Disclaimer**

   This Policy does not constitute an express or implied enrollment agreement, nor does it alter any existing agreements.

4. **Policy Modification**

   This Policy supersedes any other College policy or practice regarding student use of drugs, controlled substances, inhalants, substances used as alternatives to illicit drugs, and alcohol use, abuse, and testing. The College may, at any time and with or without notice, amend, supplement, modify, or change any part of this Policy. This Policy will automatically incorporate any changes necessary to comply with federal or state laws without prior notice to students. Any failure to enforce the Policy, or any variation, addition, or omission of procedures outlined in the Policy, shall not grant students any contractual or other rights not otherwise conferred by law.

5. **Designated Information Representative (DIR)**

   An individual at the College will be designated as the Designated Information Representative (DIR). This person will maintain confidential records of student test results and mark a student's passing of a drug test as "Completed Drug Testing" in the applicant's profile. Any questions regarding this Policy can be emailed to the DIR, who will forward the inquiries to the appropriate office (Admissions, Counseling, or Student Services).

## 1. Student Responsibilities And Duties

Failure to comply with these duties constitutes a violation of the Policy.

- **Be Fit for Duty:** Report to campus, class, or activities in a fit-for-duty capacity, free from the influence of drugs (including medical marijuana), alcohol, controlled substances, inhalants, or other substances that pose a threat to campus safety.
- **Understand the Policy:** Review and understand this Policy, the negative effects of drug, alcohol, controlled substance, and inhalant use/misuse, and the College's testing policy.
- **Seek Help Voluntarily:** Proactively seek help if struggling with substance use issues before they affect your college experience.
- **Drug Law Convictions:** Notify the College's DIR within five calendar days if convicted of a drug law violation or if a plea of nolo contendere is entered.
- **Medication Use:**
  - If prescribed medication or taking over-the-counter drugs, the student should consult their prescribing physician to determine whether the medication may pose a threat to campus safety.
  - Students in safety-sensitive programs are prohibited from being on campus under the influence of medical marijuana.
  - Notify the DIR about any medications that could impact your fitness-for-duty or pose a direct threat to campus safety. You are not required to disclose your medical condition, only that you are using medication that may affect campus safety.
- **Physician's Statement:** Provide a copy of your physician's statement verifying your ability to safely perform the essential functions of your program before participating in campus- or program-related activities.
- **Impact of Prescription Drugs on Safety:** If a prescription or over-the-counter drug poses a direct threat to campus safety, the College will determine whether you may remain on campus or attend class. The College may seek a second opinion from a medical professional of its choice.
- **Support Drug Education:** Participate in and support College-sponsored drug education programs.
- **Cooperate with Investigations:** Cooperate with investigations and support the College's efforts to address drug, alcohol, or substance abuse among students.
- **Medication Storage:** All medications must be kept in their original containers while on campus.

## 2. Prohibited Conduct

**Illegal Drugs:** It is a violation of College Policy for anyone associated with the College to sell, manufacture, distribute, dispense, use, possess, purchase, obtain, transfer, convey, be under the influence of, or test positive for controlled substances in violation of federal or state law (or to attempt any of the above actions).

**Controlled substance** is defined in this Policy as a drug that federal or state law has declared to

be illegal for sale or use, though it may be dispensed under a physician's prescription.

**Prescription Drugs:** Prescription medications are not prohibited under this Policy if taken as directed in standard dosages and/or under a physician's written prescription, provided the medication does not pose a threat to campus safety or render the student unfit for duty. However, the abuse of prescription drugs is strictly prohibited. This includes, but is not limited to, exceeding the prescribed dosage, using medication for unintended purposes, or using medication prescribed to another individual. Students are also prohibited from using or possessing medical marijuana on campus.

**Over-the-Counter Drugs**: Over the counter medication are not prohibited when taken in the standard dosage as directed, provided they do not render the student unfit to perform the essential functions of their program of study or negatively impact campus safety. The College prohibits students from being under the influence of mood-altering over-the-counter drugs that are used contrary to the product's labeling (i.e., misuse of over-the-counter drugs) while subject to the terms of this Policy.

**Alcohol**: The College prohibits students from illegally using, possessing, selling, buying, distributing, or attempting to distribute or manufacture alcohol, as well as being involved in any illegal alcohol-related conduct. This includes, but is not limited to, driving under the influence and underage drinking violations, while subject to the terms of this Policy.

For purposes of this Policy, the term "alcohol" includes any intoxicating agent found in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols, and includes any medication or food containing alcohol. Additionally, the College prohibits students from the following alcohol-related conduct while subject to this policy:

- Possessing opened containers of alcohol.
- Using, consuming, distributing, manufacturing, dispensing, or being under the influence of alcohol.
- Operating a motor vehicle on campus property while under the influence of alcohol.
- Using or consuming alcohol within four hours before arriving on campus.
- Participating in any campus-related activities or program-related coursework, or operating tools or machinery on College property while under the influence of alcohol.
- Consuming alcohol within eight hours following an accident and/or before a post-accident test, as specified in the Policy.

**Inhalants and Legal Substances**: Students are prohibited from arriving on campus property, participating in campus-related activities, or program-related coursework, or operating tools or machinery while under the influence of, or using, any inhalant.
An "**inhalant**" is defined as glue, paint, aerosol, anesthetic, cleaning agent, solvent, or other substance that, when inhaled or ingested, causes intoxication, euphoria, excitement, exhilaration, stupefaction, or dulling of the senses and that contains chemicals including, but not limited to, chemicals such as toluene, xylene, hexane, acetone, methylene chloride, methanol, Freon(s), benzene, (iso) amyl nitrate, (iso) butyl nitrite, (iso) propyl nitrite, N-butyl

nitrite, butane, propane, fluorocarbon, hydrocarbons, ethyl chloride, nitrous oxide, halothane, tetrachloroethylene, trichloroethane, or trichloroethylene.

The College also recognizes that certain legal substances can be used in place of illicit substances to create similar effects (intoxication, euphoria, excitement, exhilaration, stupefaction, and/or dulling of the senses). Students are prohibited from arriving on campus property, participating in campus-related activities or program-related coursework, or operating tools or machinery while under the influence of, or using, any legal substance for these purposes.

The College uses the concept of "**reasonable suspicion**" to determine if a Policy violation has occurred involving the use of inhalants or other legal substances. Reasonable suspicion may be based on, but is not limited to, the following observations:

- **Physical symptoms** of being under the influence, such as bad breath, substance odor, runny nose, watery eyes, drowsiness, unconsciousness, slurred speech, poor muscle control, mood swings, irritability, nausea, hallucinations, facial rashes, constant sniffing or coughing, irritability, anger, agitation, uncontrolled laughter, nausea, loss of appetite, vomiting, hallucinations, convulsions, facial rashes and blisters, constant sniffing and coughing, slurred speech, depressed reflexes, rapid movement of the eyeballs, dilated pupils, etc.
- **Pattern of abnormal conduct** or erratic behavior, or deteriorating performance in College activities, linked to the use of inhalants or legal substances.
- **Identification in a criminal investigation** concerning the illegal use of inhalants or legal substances.
- **Admission by the student** of illegal use of inhalants or legal substances.
- **Repeated safety violations** or risks of injury or property damage, linked to inhalant or substance misuse.
- **Reports from credible sources** about the misuse of inhalants or legal substances, which have been independently corroborated.
- **Possession of drug paraphernalia:** Students are prohibited from bringing paraphernalia related to the illegal use of drugs onto College property.

## 3. Student Drug And Alcohol Testing

**Random Drug Testing**

Students enrolled in safety-sensitive programs are required to participate in random drug testing. Selections for testing will be made using computer-generated random numbers. Students selected for random drug testing must agree to be tested within twelve hours; otherwise, the test results will be recorded as positive and treated according to the Policy.

**Reasonable Suspicion**

The College may require a student to submit to drug and/or alcohol testing based on

reasonable suspicion. The decision will be made in judgment of the College, using information available at the time. Testing will be required if the student is deemed unfit for duty, or if there is a reasonable suspicion that the student is using drugs or alcohol in violation of the College's Policy, or if the student exhibits the physical signs and symptoms of substance abuse. The evidence for reasonable suspicion will be drawn from specific, observable facts and reasonable inferences, which may include, but not limited to, the following:

- Observable behavior, such as direct observation of drug or alcohol abuse, possession, distribution, or physical symptoms of being under the influence (e.g., slurred speech, dilated pupils, odor of alcohol or marijuana, mood swings, etc.). Observation may also include indications of chronic or withdrawal effects from the illegal use of drugs;
- A pattern of abnormal conduct, violent or erratic behavior, or deteriorating performance in College-related activities that appears to be related to substance abuse or misuse.
- Identification of the student as the focus of a criminal investigation into unauthorized drug possession, use, or trafficking.
- Admission by the student that they were involved in the illegal use of drugs or the misuse of alcohol.
- Repeated violations of the College's Code of Conduct, safety, or other rules that pose a substantial risk of physical injury or property damage and appear to be related to substance abuse or misuse that may violate the College's Policy.
- A report of drug or alcohol use from reliable, credible sources, which has been independently corroborated.
- Evidence of tampering with a drug or alcohol test.
- A student's failure to report an accident.

**Post-Accident:**

The College may require a student involved in a campus-related accident or incident to submit to drug and/or alcohol testing following the accident. The College may also test any individual whose actions created a "near miss" or unsafe condition, or who contributed to a campus-related accident. This determination will be based on the best information available at the time of the accident.

The post-accident test will be administered as soon as possible. This requirement is not intended to delay necessary medical treatment for an injured person(s) following the accident, nor to prevent a student from leaving the scene to seek medical assistance for themselves or others.

To ensure proper application of this policy, students must report accidents to an instructor, nurse, residence hall director, or other assigned staff within 24 hours of the occurrence and then submit to a post-accident test as directed. Failure to report an accident promptly and to submit to a post-accident test will be considered a refusal to test and will subject the student to discipline, up to and including expulsion. It will also create reasonable suspicion for the College to test the student once it receives notice of the accident.

For purposes of this Policy, a campus-related accident is defined as an unplanned, unexpected, or unintended event that occurs on or involves College property or occurs while a student or staff member is representing the College off-campus. A campus-related accident includes any of the following:

- a serious violation of a safety rule or the program standards;
- a fatality of anyone involved in the accident;
- a serious bodily injury requiring medical treatment;
- other serious property, vehicular, or equipment damage occurs.

**Return-to-College**

The College will require a student who has violated this Policy and seeks re-admission to test negative on a return-to-college drug test before being allowed to return. Additionally, the College may require a return-to-college alcohol test if the prohibited conduct involves alcohol or if a treatment provider recommends such a test. The inclusion of this paragraph does not obligate the College to offer readmission to the student.

**Follow-up**

Following a determination that student needs assistance with issues related to alcohol misuse and/or the illegal use of drugs, the student may be subject to unannounced follow-up drug and/or alcohol testing as directed by a treatment professional. The frequency and number of these tests will be determined by the treatment professional. If deemed necessary, the student may be required to undergo follow-up testing for alcohol and drugs. This follow-up testing will remain in place for the duration of the student's enrollment at the College, starting from the date of their return-to-college. The inclusion of this paragraph does not obligate the College to reinstate the student or conduct follow-up testing.

**Testing Procedures for Drugs**

Testing for illegal use of drugs will typically be conducted through a nine-panel test plus urine specimens collected at a designated site. The collection site will take the necessary steps to ensure the specimen is not adulterated or tampered with and will maintain a strict chain-of-custody. The specimen will then be transported to a U.S. Department of Health and Human Services-certified laboratory for screening and confirmation testing for the following drugs and their metabolites: marijuana (including medical marijuana), amphetamines (including methamphetamines), phencyclidine, opiates, cocaine, barbiturates, methadone, benzodiazepines, and propoxyphene.

**Testing Procedures for Alcohol**

The initial alcohol testing will typically be conducted using either a saliva or breath specimen. If the Breath Alcohol Content is less than 0.02, the test will be considered negative. If the screening test results show an alcohol concentration of 0.02 or greater, a confirmation test will be performed. The confirmation test will be conducted using a breath specimen obtained through an Evidentiary Breath Testing device approved by the United States Department of Transportation's Drug and Alcohol Misuse Prevention Program. If the confirmation test result

is .02 or greater, the test will be considered positive, and the student subject to disciplinary action as outlined in this Policy.

**Screen and Confirmation Testing**

All urine samples will undergo an initial test. If the specimen tests above the screening cut-off levels set by the U.S. Department of Health and Human Services in its Mandatory Guidelines for Federal Workplace Drug Testing Programs, the test will be considered positive. The sample will then undergo a confirmation test. Test results indicating illegal drug use at levels below the confirmation cut-off limits will be considered negative, while those above the confirmation cut-off levels will be considered positive.

**Review of Test Results by Medical Review Officer (MRO):**

All positive drug test results will be reviewed and interpreted by a Medical Review Officer (MRO) being reported to the College. The MRO is a licensed physician responsible for reviewing laboratory results generated by an employer's drug testing program and evaluating medical explanations for certain test results.

The MRO's review of a positive test result may include examining the student's medical history or other relevant biomedical factors. If the MRO finds a legitimate medical explanation for the test results, they will report the result as negative to the College.

If the MRO is unable to contact the tested student directly despite making reasonable efforts, they will contact the Designated Information Representative (DIR), who will instruct the student to contact the MRO as soon as possible. The College will use email and/or phone to contact the student. The College will maintain the confidentiality of the student's requirement to contact the MRO to the maximum extent possible. If the student fails to contact the MRO within three days of being instructed to do so, the MRO will report the test as positive.

a. **Validity Testing**
   Validity tests, which might also occur, evaluate a urine specimen to determine if it is consistent with normal human urine; it includes testing for creatinine concentration, specific gravity, pH, and substances that may be used to adulterate a specimen.
b. **Direct Observation/Monitoring**
   The College reserves the right to have its collection site agent conduct a direct observation or monitoring of the urine specimen collection if the collection site personnel observes an attempt to tamper with the specimen, it its temperature is out of range, if it appears to have been tampered with, if the laboratory reports an invalid test and if the MRO states no medical reason, the result is positive, adulterated or substituted, canceled, and for return-to-duty or follow-up testing.
c. **Dilute Specimens**
   If the MRO informs the College that a drug test was positive dilute, the College will treat the test as a verified positive result. The College will not direct the student to take another test because it was dilute. For negative-dilute test results, the College will

require a student to take another test immediately, but it will not be collected under direct observation unless there is another basis for direct observation. If the College directs another test, then the result of the second test, not the original test, becomes the controlling test result.

d. **Re-collections**
When the College directs the student to take another test, the student shall be given the minimum possible advance notice, which could be immediately, that he or she must go to the collection site. The result of the second test, not the original test, is the test of record. Any student required to take another test, which is also negative and dilute, will not be permitted to take a third test. If the MRO directs the College to conduct a re-collection under direct observation, the College must immediately do so. If the College directs the student to take a second test and the student refuses, the test will be treated as a positive result.

e. **Verification Testing**
For urine drug testing, one portion of the specimen will be preserved for a limited period after the student is told the test results. If the portion originally analyzed (the primary sample) is positive, the student has the right to specify a laboratory certified by the U.S. Department of Health and Human Services to which the preserved portion will be sent for independent analysis. The verification test cost is the responsibility of the student. The verification test result shall determine the outcome.

f. **Refusal to Test and Test Tampering**
Any student who refuses to submit to testing, tampers with, manipulates, adulterates, or attempts to tamper with the testing will be treated as having a verified positive test result and as being in violation of this policy. A refusal to submit to testing includes, but is not limited to, when a student:

- Fails to report a campus-related accident as outlined in Section 5.1(c) above;
- Fails to appear for any test within a reasonable time, as determined by the College, after being directed to do so;
- Fails to remain at the collection site until testing is complete;
- Fails to provide a urine specimen for a drug test or a saliva or breath specimen for an alcohol test;
- Refuses to permit directly observed or monitored collection during a drug test;
- Fails to provide enough urine, saliva, or breath when directed, and it is determined through a required medical evaluation that there is no adequate medical explanation for the failure;
- Fails or declines to take a second test as directed;
- Fails to undergo a medical examination or evaluation, as directed by the MRO, as part of the verification process;
- Fails to cooperate with any part of the testing process; or
- Is reported by the MRO as having a verified adulterated or substituted test result.

**Confidentiality**

**Test Results**

The College will make reasonable efforts to ensure that the testing process remains private and confidential. Test results may be provided to the following parties:

- The Medical Review Officer (MRO) and their staff
- The Designated Institutional Representative (DIR)
- The student tested (upon request)
- Any person(s) permitted or required by law or regulation to receive such information
- Any individual(s) with the student's written authorization
- Law enforcement
- Decision-makers in any legal action initiated by or on behalf of the student, or placed at issue by the student in any legal, administrative, or other proceedings

Nonspecific statistical information may also be provided, upon request, to a corporation that requires its vendors or subcontractors to maintain drug and alcohol testing programs in accordance with a contract, or to a governmental agency as required by law.

**Separate Files**

Test results will be stored in a locked file cabinet or a secured file room, separate from student educational files.

**Costs for Testing**

a. Students applying for admission or re-admission, if required to undergo testing for medical clearance and acceptance into safety-sensitive programs, are responsible for the cost of testing.
b. Students selected for testing due to accidents, random testing, or reasonable suspicion must pay for the test unless the results are negative. In that case, the College will bear the costs.
c. Students who test positive and require ongoing testing during their enrollment will be responsible for the cost of that testing.

**Discipline For Policy Violations**

Any student reasonably believed to have violated this Policy is subject to expulsion.
The College encourages students who are chemically dependent to voluntarily seek assistance or treatment for substance abuse problems before they lead to problems on campus. A student's decision to voluntarily seek help for such issues will not be used as a basis for disciplinary action. However, students may not avoid disciplinary consequences by requesting treatment or a leave of absence after being selected for testing or after violating the College's Policy.

- **When determining the appropriate sanctions for a Policy violation, the following factors will be considered:**
  - **The location of the violation:** If the violation occurred in a safety-sensitive area (such as a program lab/shop, class-related job site, internship placement-related location, or a College event), the student will be recommended for expulsion.

- **The amount of drugs/paraphernalia found:** If the amount of marijuana found exceeds one gram, two joints, or a bundle larger than a size of a quarter (U.S. currency), the student will be recommended for expulsion. If the student is found with paraphernalia, including, but not limited to, a needle or needles, the student will also be recommended for expulsion. However, possession of a bong or roach clip alone, without other paraphernalia Policy/Code of Conduct violations, will not result in a recommendation for expulsion.
- **Other violations of the Policy and/or the Code of Conduct:** Any violation of the College's Code of Conduct, in addition to a violation of this Policy, will result in the student being recommended for expulsion.

**Examples of drug/alcohol Policy violations and corresponding sanctions**

| Scenario | Sanction |
|---|---|
| Student is found smoking marijuana in a car parked on campus (engine off, no other drugs, drug paraphernalia, or other individuals present). Pennsylvania State Police are called, but no charges are filed against the student. | **Minor violation:** Suspended from the residence hall for 5 days, required to pay for a drug test, attend counseling, and provide a clean drug test within 45 days. |
| Student appears to be high in shop, is immediately tested, and fails the test for marijuana. | **Major violation**: Recommended for expulsion from the College. |
| Staff reports a student was involved in a fight in the residence hall and appeared to be in an altered state. During the investigation, staff finds drug paraphernalia (e.g., rolling papers and a scale). | **Major violation**: Recommended for expulsion from the College. |
| Student found intoxicated in a residence hall with three unopened cans of beer on their desk. | **Minor violation**: Suspended from the residence hall for 3 days, required to attend counseling. |

**Referral to Law Enforcement and Additional Disciplinary Actions**

- **Referral to Law Enforcement**
  In addition to internal disciplinary action, the College may refer information about criminal activities and transfer any suspected illegal drugs or drug paraphernalia to appropriate law enforcement authorities.
- **Other Discipline Not Precluded**
  This Policy does not preclude the College from disciplining a student for other violations and/or performance-related issues.
- **Automatic Suspension**
  If a student is ordered to submit to a post-accident, random, or reasonable suspicion test, they may be suspended until the MRO-verified test result is received. If the verified result is positive, the student is subject to discipline as described herein.

## Appendix B – Non-Discrimination and Harassment Policy

**POLICY STATEMENT**

Thaddeus Stevens College of Technology (the College) does not discriminate in its educational programs or employment practices, based on race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification. Announcement of this policy is in accordance with state and federal laws, including Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 503 and 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 as amended and other applicable laws and policies.

Announcement of this policy is in accordance with the Pennsylvania Department of Education and federal laws (see above). All inquiries or reports of harassment or discrimination should be directed to the Equity and Inclusion Office (717) 391-1365 on campus or the Pennsylvania Department of Education, 333 Market Street, Harrisburg, PA 17126-0333 or (717) 787-1953.

The College is committed to protecting, maintaining, and encouraging both freedom of inquiry, teaching, service, and research. However, raising issues of academic freedom and freedom of expression will not automatically excuse behavior that constitutes a violation of this Policy or the law. The College will balance the enforcement of this Policy with freedom of speech and academic freedom.

The procedures, including the grievance process, set forth in this Policy apply when an employee, student (or applicant for admission) is either a Complainant or Respondent (as the terms are defined in this Policy).

**POLICY REQUIREMENTS**

Students and employees who believe that they are being harassed or discriminated against regarding any of the above, should contact one of the following:

- Equity, and Inclusion Officer (717) 391-1365
- Director of Employee Engagement (717) 391- 6935
- Vice President for Student Services (717) 299-7794

The following policy requirements are intended to protect the rights of the reporting party, as well as the party whom a complaint of harassment or discrimination is reported against. Each complaint will be investigated, and appropriate action will be taken.

Reports under this policy should be brought as soon as possible after the alleged conduct occurs. Prompt reporting will enable the College to investigate the facts, determine the issues, and provide an appropriate remedy or personnel action.

This policy applies when:

- Any employee or student who witnesses, has been subjected to, or has knowledge of discrimination or harassment on the basis of race, color or national origin, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification.

- Any former employee or student who witnesses, has been subjected to, or has knowledge of discrimination or harassment based on any legally protected classification, if the conduct took place during the time of employment or enrollment at the College.
- All third parties with whom the College has an educational or business relationship who witnesses or has been subjected to discrimination or harassment on any legally protected classification and or any other legally and/or any other category protected that applies to the Thaddeus Stevens College of Technology when the conduct has a reasonable connection to the College.

This Policy applies to all College programs and activities, including, but not limited to, discrimination and harassment in instruction, grading, athletics, college housing, programs and activities and college employment when:

- The alleged violations occur on college owned, leased, or otherwise controlled property, while participating in college affiliated programs.
- The alleged violations occur off campus and the conduct impair, interferes with or obstructs any college activity or the mission, processes, and functions of the College.

This Policy shall not be construed or applied to restrict academic freedom, nor shall it be construed to restrict constitutionally protected expression.

**Note:** This policy has been updated to include, but not limit, discrimination and harassment in instruction, grading, campus housing, athletics, and employment. This policy also applies to alleged violations that occur on college owned, leased, or otherwise controlled property, while participating in all academic programs, on and off campus, when the conduct impairs, interferes with, or obstructs any college activity or the mission, processes, and functions of the College. This policy also applies to any off-campus behavior that affects a substantial college interest. A substantial college interest includes:

- Any situation where an employee or student's conduct may present a danger or threat to the health or safety of others;
- Any situation that significantly impinges upon the rights, property, or achievement of others;
- Any situation that is detrimental to the educational mission and/or interests of the College.

This policy shall not be construed to restrict academic freedom or to restrict constitutionally protected expression. The College is committed to protecting, maintaining, and encouraging both freedom of inquiry, teaching, and service. However, raising issues of academic freedom and freedom of expression will not automatically excuse behavior that constitutes a violation of this policy or the law. The College will balance the enforcement of this policy with freedom of speech and academic freedom.

The procedures, including the grievance process, set forth in this policy apply when an employee, a student (or applicant for admission) is either a Complainant or Respondent (as the terms are defined in this policy).

**PURPOSE**

The purpose of the College's Nondiscrimination Policy is to establish guidelines in accordance with its obligations under federal and state nondiscrimination laws.

This policy provides for the orderly resolution of complaints of discrimination or harassment on the basis of race, color, ancestry or national origin, sex, sexual orientation, physical or mental disability, religion, age (as applicable), status as a protected veteran, or any other legally protected classification. The College prohibits such discrimination and harassment.

This policy establishes guidelines in accordance with the college's obligations under Title VI, Title VII, Title IX, ADA and all other state and federal nondiscrimination guidelines. The purpose of this policy is:

- To promote an education and work environment that is free from all forms of harassment and discrimination, regardless of race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, union membership or any other legally protected classification.
- To assure unlawful harassment or discrimination in any form is unacceptable and of particular concern to an academic community. Therefore, unlawful harassment or discrimination will not be tolerated. Those inflicting such behavior on others are subject to the full range of the college's disciplinary actions, up to and including separation from the college, in addition to any legal action that may accompany such acts.
- Students, faculty, staff, and all who conduct business on behalf of the college are permitted to file complaints of discrimination and harassment under this policy with the Equity, and Inclusion Office.

**SCOPE**

**This Policy applies when:**

- Any employee or student who witnesses or has been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, union membership or any other legally protected classification;
- Any former employee or student who witnesses or has been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification, if the conduct took place during the time of employment or enrollment at the College;
- Any employee or student who has knowledge of discrimination or harassment on the basis that apply to the College against another employee or student, to report such offenses; and,
- All third parties with whom the College has an educational or business relationship who witness or have been subjected to discrimination or harassment on the basis of race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, or any other category protected that applies to Thaddeus Stevens College of Technology when the conduct has a reasonable connection to the College.

This Policy applies to all College programs and activities, including, but not limited to, discrimination

and harassment in instruction, grading, athletics, college housing, programs and activities, and college employment when:

- The alleged violation occurs on college owned, leased, or otherwise controlled property, while participating in college affiliated programs;
- The alleged violation occurs off campus, and the conduct impairs, interferes with, or obstructs any college activity or the mission, processes, and functions of the College;

This policy also applies to any off-campus behavior that affects a substantial College interest. A substantial College interest is:

- Any situation where an individual's conduct may present a danger or threat to the health or safety of others;
- Any situation that significantly impinges upon the rights, property, or achievements of others;
- Any situation that is detrimental to the educational mission and/or interests of the College.

This policy shall not be construed or applied to restrict academic freedom, nor shall it be construed to restrict constitutionally protected expression.

**DEFINITIONS**

**Complainant:** An individual making a complaint of discrimination and/or harassment.

**Respondent:** An individual who is alleged in a complaint to have violated the policy prohibiting discrimination and/or harassment.

**Discrimination:** Treating an individual differently or less favorably or engaging in conduct that denies an individual the opportunity to participate in or benefit from a College program or activity, or otherwise adversely affects a term or condition of an individual's employment, education, or living environment, because of the individual's race, color, national origin, sex, sexual orientation, disability, age (as applicable), religion, ancestry, veteran status, or any other legally protected classification. Unlawful discrimination under any local, state, or federal law.

**Harassment:** Unwelcome verbal or physical behavior which is directed at a person based on a protected characteristic, when these behaviors are sufficiently severe and/or pervasive to have the effect of unreasonably interfering with an individual's educational experience, or working conditions, by creating an intimidating, hostile, or offensive learning or working environment.

Examples of conduct that can constitute harassment if based on an individual's protected characteristic include but are not limited to:

1. Unwelcome comments or jokes about a legally protected characteristic (e.g., racial, or ethnic jokes);
2. Disparaging remarks to a person about a legally protected characteristic (e.g., negative, or offensive remarks or jokes about a person's religion or religious garments);
3. Displaying negative or offensive posters or pictures about a legally protected characteristic;
4. Communications, including those conveyed in person, mail, electronically, such as by e-mail, telephone or voicemail, text messaging, or social media or other internet use.
5. Behavior that is sufficiently serious (severe, pervasive, and objectively offensive) to effectively deny or limit a person's ability to participate in, or benefit from, the College's programs, activities, services, or opportunities;

6. Is used as a basis for, or factor in, decisions that tangibly affect that individual's education, employment, or participation in the College's activities, learning or working environment.

**Retaliation:** Actions taken against the Complainant for: reporting discrimination and harassment; filing a complaint of discrimination or harassment; or participating in, or refusing to participate in, the investigation, grievance, or other procedures of this Policy. Retaliation is also prohibited against persons who assist others in bringing a complaint of discrimination or harassment by offering advice and moral support or by giving testimony or documentary evidence in response to a complaint.

Prohibited retaliation includes conduct that may reasonably be viewed as:

- An adverse employment action;
- An adverse action relating to participation in an educational program;
- Unreasonably interfering with the academic or professional career of another individual;
- Engaging in conduct which constitutes stalking, harassment, or assault;
- Engaging in efforts to have others engage in retaliatory behavior on one's behalf.
- Engaging in efforts that affect or discourage a person from filing a report or complaint of discrimination or harassment or participating in an investigation or other proceedings under this Policy, or, reporting to or participating in procedures with any other local, state, or federal complaint process, such as filing a complaint with the Equal Education Opportunity Officer, Pennsylvania Department of Education.
- Retaliation that also includes, but is not limited to, acts or words that constitute intimidation, threats, or coercion intended to pressure any individual to participate, not participate, or provide false or misleading information during any proceeding under this Policy.
- Prohibited retaliation against a person who protests discrimination or harassment practices within the College.

The College will not charge an individual under a separate policy or Code of Conduct for behavior arising out of the same facts or circumstances reported as discrimination or harassment for purposes of interfering with non-discrimination protections. The College will attempt to keep confidential the identity of complainants, respondents, and witnesses, except as may be required by law, permitted under FERPA, or deemed necessary to conduct the non-discrimination process.

**RESPONSIBILITIES**

**College Response:**

Upon receiving notice of potential discrimination, harassment, or retaliation the College will promptly respond to Complainant to investigate the complaint.

The College may respond as follows:

1. In situations that require urgent attention, because of safety or other concerns, the College will take immediate administrative actions pending the outcome of the investigation.
2. In situations that do not require urgent attention, the appropriate responder, Equity and Inclusion Officer, Director of Employee Engagement or the Vice President of Student Services will respond.
3. The College will follow the grievance process set forth in this Policy before the imposition of

any disciplinary sanctions or other actions against a Respondent.

4. The College will not restrict rights protected under the U.S. Constitution, including the First Amendment, Fifth Amendment, and Fourteenth Amendment, when complying with discrimination, harassment, or retaliation.
5. The College will investigate discrimination, harassment, or retaliation allegations in a Complaint filed pursuant to this Policy.

The College should respect a Complainant's wishes with respect to whether it investigates the reported incident wherever possible unless it is determined by the College official that signing a complaint to initiate an investigation over the wishes of the Complainant is not clearly unreasonable, considering, the known circumstances. The College reserves the right to investigate any issues regarding potential violations of College policy or applicable law.

At the time of filing a complaint, a Complainant must be an employee, a student or attempting to participate in an education program or activity of the College to implicate the College's process.

**COMPLAINT AND INVESTIGATION PROCESS**

**Complaint of Discrimination or Harassment:**

As explained above, reports of discrimination or harassment may be made by anyone, including anonymously, to the appropriate College officials (Equity and Inclusion Officer; Director of Employee Engagement or the Vice President of Students;). If that occurs, the College official will promptly review the allegations to determine if they may constitute discrimination or harassment in violation of this Policy that may warrant the filing of a Complaint.

A complaint may be filed with the College in person, **by online portal (homepage)**, mail, or by electronic mail, by using the contact information listed in this Policy for the Equity, and Inclusion Officer, Director of Employee Engagement, or the Vice President of Students. The College reserves the right to redirect complaints to what it deems to be the appropriate office or department under the circumstances.

**Notice of Allegations:**

Upon receiving a Complaint, the College will complete a prompt, fair, and impartial investigation of the allegations. The College's complaint and investigation process is intended to be an equitable process. **Respondents are presumed not responsible** for the alleged conduct and no determination regarding responsibility will be made until the conclusion of the process. The investigation will be conducted by an investigator(s) appointed by the College.

The Respondent and Complainant will be promptly provided with a **"Notice of Allegations."** At a minimum, such Notice shall include the allegations of conduct potentially constituting discrimination or harassment, including sufficient details known at the time and with sufficient time to prepare a response before any initial interview. Such details include the identities of the parties involved in the incident, if known, the conduct allegedly constituting discrimination or harassment, and the date and location of the alleged incident, if known. The Notice will include a statement that the Respondent is presumed not responsible for the alleged conduct and that a determination regarding responsibility will be made at the conclusion of the investigation process. The Notice will also inform the parties that they may each have an advisor of their choice, who may be, but is not required to be, an

attorney, and may inspect and review evidence.

The Notice will also inform the parties that knowingly making false statements to college officials during the investigation may be referred for review and result in disciplinary action under the Student Code of Conduct or Human Resources as appropriate.

The Notice of Allegations shall be provided as soon as reasonably practicable, but no more than seven (7) College Days after the receipt of a Complaint.

**Investigation by the College:**
An investigation shall be promptly conducted by the College, or as soon as reasonably possible, through one or more investigators who will not have a conflict of interest in the matter. The College may utilize an independent investigator when deemed appropriate and has complete discretion to do so. When investigating a Complaint (and throughout the entire investigation process), the College will:

1. Ensure that the burden of gathering evidence is on the College and not on the parties;
2. Provide an equal opportunity for the parties to present witnesses, including fact and expert witnesses, and other evidence;
3. Not restrict the ability of either party to discuss the allegations under investigation or to gather and present relevant evidence;
4. The parties will have the same opportunities to have an advisor present during any investigation proceeding, including the opportunity to be accompanied to any related meeting, or proceeding by the advisor of their choice; ***the advisor may not serve as a witness for the investigation and may not speak on behalf of the complainant or respondent in any meeting or investigation proceeding***;
5. Provide, to a party whose participation is invited or expected, written notice of the date, time, location, participants, and purpose of all investigative interviews or other meetings, with sufficient time for the party to prepare to participate;
6. Prior to the completion of the investigative report, the College will invite each party to submit any supplemental written statements and evidence, and the parties will be given at least seven calendar days to submit said information, which the investigator will consider prior to completion of the investigative report.
7. The investigation stage of the process, ending with the issuance of the investigative report shall be completed in no more than 60 College Days, but may be extended in intervals of 14 College Days, with written notice explaining the reason for the extension.

**Options for Informal Resolution after Complaint Is Filed:**
An informal resolution process may be used only when both the Complainant and Respondent voluntarily agree to participate, and only after a Complaint has been filed. If the parties elect to proceed with an offered informal resolution process, this process would be in lieu of the Formal Investigation Process. No one can be forced to go through the informal resolution process.

If an informal resolution option is offered by the College, both parties, prior to deciding on whether to participate in the informal resolution process, will be provided with written notice describing the process and implications of participating. The notice will describe the allegations against the

Respondent. It will also describe the informal resolution process, including the right of either party at any time prior to the voluntary agreement to a resolution to withdraw from the informal resolution process and require the matter to resume under the Complaint and Investigation Process.

If in a particular case expulsion is a proposed sanction, it, like all other potential outcomes, can only occur if both parties agree to it as part of resolution.

Any mediators or other individuals offered by the College to facilitate an informal resolution process will be trained, including with respect to, among other things, the definition of discrimination and harassment, how to conduct the process, and how to avoid conflicts of interest and bias in discharging their duties.

An informal resolution process shall be completed within sixty (60) College Days of the agreement of all parties to use the informal resolution process unless an extension of time is agreed to by all parties. If either party withdraws from the informal process, or no mutually agreeable resolution can be reached during the timeframe for the informal resolution process, the formal investigation process shall resume. (The timeframes applicable to the formal investigation process shall be put on hold during any informal resolution process and shall restart if the informal resolution process is terminated without an agreed upon resolution.)

**Dismissal of Complaint:**
If conduct alleged in the Complaint would not constitute discrimination or harassment, even if proven, or falls outside of this Policy, then the College will dismiss the Complaint with regard to that conduct for purposes of discrimination or harassment under this Policy and refer the complaint to the appropriate College official, *i.e.*, the Equity and Inclusion Officer, Director of Employee Engagement, Vice President of Students, or as appropriate to be reviewed under the Student Code of Conduct or Human Resources policies. In addition, the College **may dismiss** a Complaint or any allegations therein, if at any time during the investigation a Complainant notifies the investigator in writing that the Complainant would like to withdraw the Complaint or any allegations therein; the Respondent is no longer enrolled at or employed by the College; or specific circumstances prevent the College from gathering evidence sufficient to reach a determination as to the Complaint or allegations therein.

An ***appeal*** may be made by either party from a dismissal of a Complaint or any allegations therein within the time limit and on any of the three grounds specified in the Appeals section of this Policy.

**Determination of Responsibility:**
Following the investigation, the investigator shall issue a ***written determination*** of responsibility or non-responsibility. The written determination shall be issued as soon as reasonably practicable at the conclusion of the investigation, but not later than ten (10) College Days after the close of the investigation.

The written determination will include at minimum the following items:

1. An identification of the allegations potentially constituting discrimination or harassment;
2. A description of the procedural steps taken from the receipt of the Complaint through the determination, including any notifications to the parties, interviews with parties and witnesses, site visits and methods used to gather other evidence;
3. Findings of fact supporting the determination;

4. Conclusions regarding the application of the appropriate College policy to the facts if the College exercises its discretion to apply any College policies and procedures not otherwise required under discrimination or harassment;
5. A statement of, and rationale for, the result as to each allegation, including a determination regarding responsibility, any disciplinary sanctions the College imposes on the Respondent, and whether remedies designed to restore or preserve equal access to the College's education program or activity will be provided by the College to the Complainant; and
6. The applicable procedures and permissible bases for the Complainant and Respondent to appeal (as described below).

**Appeal:**
Either the Complainant or the Respondent may appeal from either a (1) determination of responsibility/non-responsibility or (2) dismissal of a Complaint or any allegations therein, by filing a Notice of Intent to Appeal on the following three grounds, and no other grounds:

1. A procedural irregularity that affected the outcome of the matter;
2. New evidence that was not reasonably available at the time the determination regarding responsibility or dismissal was made, that could affect the outcome of the matter; and/or
3. The investigator had a conflict of interest or bias for or against Complainants or Respondents generally or the individual Complainant or Respondent that affected the outcome of the matter.

Any such ***Notice of Intent to Appeal*** must be filed by either party within **two (2) College Days** of issuance of a determination regarding responsibility/non-responsibility or the complaint dismissal.

The Notice of Intent to Appeal must be followed **within three (3) additional College Days** by the filing of a detailed written ***"Statement of Appeal"*** identifying grounds for appeal and explain with specificity the facts supporting the basis of the appeal. Failure to timely file either the Notice of Intent to Appeal or the Statement of Appeal will result in the appeal being dismissed.
The College will immediately provide a copy of any Notice of Intent to Appeal and of the appealing party's Statement of Appeal to the non-appealing party. **The non-appealing party will have five (5) College Days** from the date the appeal was sent to the party's College email, if desired, to submit a written "***Response to Statement of Appeal***." If such Response to Statement of Appeal is filed, a copy will be immediately provided by the College to the appealing party, but the appealing party shall not have the right to submit an additional statement.

Notices of Intent to Appeal, Statements of Appeal, and Responses to Statements of Appeal must be submitted in writing to:

**Dr. Pedro Rivera, President**
**Office of the President**
**Mellor Building**
**Thaddeus Stevens College of Technology**
**750 East King Street**
**Lancaster, PA 17602**

The President or President's designee will review the appeal, including all party submissions, and issue a written decision to all parties involved within thirty (30) College Days, or as soon as is reasonably possible, but not later than forty-five (45) days after receipt of the written Notice of Intent

to Appeal. This is the last step in the College's Formal Complaint procedure.

**DISCIPLINARY ACTIONS**

Employees and students who violate this Policy are subject to appropriate discipline by the College. If an investigation results in a finding of responsibility that this Policy has been violated, the mandatory minimum discipline is a written reprimand.

Upon the finding of a serious violation of this Policy, the College reserves the right to take disciplinary measures, up to and including, termination of employment, expulsion or suspension, removal from campus, cancellation of contract, and any other appropriate actions necessary to address the violation.

Appropriate disciplinary actions shall be taken against any person found to have participated in any acts of retaliation. Any attempt to penalize or retaliate against a person for filing a complaint or participating in the investigation of a complaint regarding a violation of this Policy will be treated as a separate and distinct violation of the Policy. Specifically:

1. A student found to have retaliated in violation of this Policy shall be subject to discipline up to, and including, suspension and/or expulsion.
2. A College employee found to have retaliated in violation of this Policy shall be subject to discipline up to, and including, termination of employment.
3. A College non-employee found to have retaliated in violation of this Policy shall be subject to measures up to, and including, exclusion from a College relationship and College grounds.
4. Persons who violate this Policy may also be subject to civil damages or criminal penalties.

**SUPPORTIVE MEASURES**

Supportive measures by the College may include, but may not be limited to:

1. Providing escorts to ensure an individual can safely move between classes and activities;
2. Where possible and as appropriate, assure the Respondent and Complainant do not attend the same classes;
3. Moving the Complainant and/or Respondent to a different residence hall;
4. Providing counseling services for the Respondent and Complainant;
5. Providing academic support services, such as tutoring to the Respondent and Complainant.
6. The College may also provide remedies and additional training for the college community.

**EDUCATION AND PREVENTION**

Education is an essential component in the prevention and elimination of discrimination and harassment. To accomplish an adequate non-discrimination and harassment educational program, the College shall:

1. Educate members of the College community on what constitutes prohibited conduct under this Policy.
2. Inform members of the College community of this Policy and training programs to assure their implementation.

**Training:**

The Equity and Inclusion Officer shall oversee and coordinate training regarding discrimination and harassment prevention education.

**Dissemination of the Policy**:
A copy of this Policy shall be distributed throughout the campus and shall be published on the College's website.

**Public Notification of Clery Act Statistics:**
To the extent required by law, including the Clery Act, the College shall collect and annually report statistical information concerning discrimination and harassment reports (Hate Crimes) occurring within its jurisdiction. To promote public safety, the College will alert the campus community of incidents and developments of immediate concern.

**Resources:**
**Information on Counseling and Victim Services:** For further information on the counseling services available to student victims of discrimination and harassment, contact:

**Counseling Services:**
717-299-7408

**Health Services:**
717-299-7769 (Main Campus)
717-606-1560 (Griscom Campus)
717-606-1561

**Employee Assistance Program:**
1-800-692-7459

**Recordkeeping**:
The College shall maintain for a period of seven (7) years records of:

1. Each discrimination and harassment investigation including any determination regarding responsibility and any audio or audiovisual recording or transcript, any disciplinary sanctions imposed on respondents, and any remedies provided to the complainants designed to restore or preserve equal access to the recipient's education program or activity;
2. Any appeal and the result of the appeal;
3. Any informal resolution and the results;
4. Any actions, including supportive measures taken in response to a report of discrimination or harassment, as well as documentation of the College's conclusions and measures taken.

**Questions/Contact**:
If you have questions or are concerned that the College has not met its obligation under this Policy, please contact the Equity and Inclusion Office.

**PROCEDURES FOR REPORTING DISCRIMINATION**
Students and employees who believe that they are being harassed or discriminated against regarding any of the above, should contact one of the following:

**Office of Equity, and Inclusion (717)-391-1365**
**Office of Employee Engagement: (717) 391-6935**
**Office of the Vice President for Student Affairs: (717) 299-7794**

The following procedures are intended to protect the rights of the reporting party, as well as the party whom a complaint of harassment or discrimination is reported against. Each complaint will be investigated, and appropriate action will be taken.

Reports under this policy should be brought as soon as possible after the alleged conduct occurs. Prompt reporting will enable the College to investigate the facts, determine the issues, and provide an appropriate remedy or personnel action.

**Reporting and Filing Complaints of Discrimination or Harassment:**
Any incident of unlawful discrimination or harassment in violation of this Policy must be reported to the appropriate College official, Equity and Inclusion Officer, Director of Employee Engagement, Vice President of Students. Forms and procedures for reporting these complaints of discrimination or harassment are available in each of these offices or online at: online portal on the College's homepage.

**Additional Information on Reporting:**
**Confidential Employees:** Professional licensed counselors, disabilities coordinator, health services professional, and pastoral counselors who provide health, and counseling services to members of the College community are ***not permitted*** to report any information without the complainant's permission.

**Office for Civil Rights**: In addition to the procedures in this Policy for reporting, individuals may also contact the Office for Civil Rights (OCR):

**U.S. Department of Education**
Office for Civil Rights
Lyndon Baines Johnson Department of Education Bldg. 400 Maryland Avenue, SW
Washington, DC 20202-1100
**Telephone**: 800-421-3481
**Fax**: 202-453-6012
**TDD**: 800-877-8339
**Email**: OCR@ed.gov

**Forms:**
Incident Reporting Form (See Attached)

**History: Updated: 02/17/2025**

**Thaddeus Stevens College of Technology Student/Employee Discrimination and Harassment Incident Reporting Form:**

Name: _____
Local Address: _____

Work Phone: _____ Local Phone: _____ Cell Phone: _____

Date of Incident: _____Time of Incident: _____AM /PM: _____

Location of Incident:
_____
_____

Identify the name(s) of the individual(s) against whom you are submitting this complaint:
_____
_____
_____
_____

Please describe the nature of the incident, providing as much detail as possible to assist with the investigation of this complaint.
_____
_____
_____
_____
_____

Please provide the name(s) and contact information of any witness(es).
**Name** **Telephone**

Acknowledgement: By signing this form, I understand that this complaint will be investigated, and the alleged harasser(s), any witnesses, and persons of interest will be interviewed. The information provided in this Sexual Harassment Reporting Form is true and accurate to the best of my knowledge.

_____ _____
**Complainant** **Date**

**Special Note:** Discrimination and Harassment should be reported to the Office of Equity, and Inclusion in the Mellor Building (lower level) or at: 717-391-1365.

## Appendix C - FERPA (Family Educational Rights and Privacy Act)

The Family Educational Rights and Privacy Act of 1974 (FERPA) limits Thaddeus Stevens College of Technology's ability to release student information, including financial and academic records, without the student's authorization. This means that students must give permission for their parent or any third party to discuss non-medical issues related to their attendance. Even with FERPA consent, the student remains the primary contact with the College.
The College may disclose, "directory" information to third parties without consent.
Directory information includes:

- Name
- Address
- Email
- Phone
- Date and place of birth
- Major field of study
- Dates of attendance
- Full-time/Part-time status
- Class level
- Enrollment status (graduate/undergraduate)
- Participation in officially recognized activities and sports (including weight and height of members of athletic teams)
- Degrees, honors, and awards received

Eligible students may withhold directory information by notifying the Dean of Enrollment Services in writing within two weeks after the first day of classes of the semester they start at the College. Requests for nondisclosure are honored by the College for one academic year only and must be filed annually in the Registrar's Office. College officials with legitimate educational interest can access student records without student consent.

**1. Student Rights Under FERPA**

FERPA affords you, the student, the following rights with respect to your education records:

- The right to inspect and review your education records within 45 days from the date the College receives the access request.
- The right to request the amendment of your education records that you believe are inaccurate, misleading, or otherwise in violation of your privacy rights under FERPA.
- The right to provide written consent before the College discloses personally identifiable information from your education records, except to the extent that FERPA authorizes disclosure without consent.

Additional information regarding the Family Educational Rights and Privacy Act can be found on the U.S. Department of Education website.

**2. Submitting FERPA Permissions**

Via my.stevenscollege.edu, you can assign permissions for specific individuals to access your financial

and educational information using the electronic FERPA submission form. You must be logged into the system to submit forms through Thad's Pad.

FERPA Submission Steps:

1. Log in and select the "Student Services" tab at the top of the page
2. On the left side of the page, choose "Student Forms Center"
3. In the drop-down menu, choose "Required Student Forms"

If you have previously submitted permissions and need to make changes or add/remove anyone, contact the Registrar at registrar@stevenscollege.edu

# Search and Seizure

Students, as citizens of the Commonwealth of Pennsylvania, are protected against unreasonable search and seizure. However, this does not prohibit College authorities from conducting searches of residence hall rooms, shop lockers, or vehicles if the College has reason to believe a student is using the room, locker, or vehicle for a purpose that is either illegal or would otherwise seriously interfere with the education of the College or is in violation of the College's Code of Conduct. After reviewing the handbook/catalog, please sign below to acknowledge receipt of the handbook/catalog and your understanding of the policies as stated in this document.

When a comprehensive room search occurs, two of the following individuals will be present: Residence Hall Director, Director/Assistant Director of Residence Life, Vice President of Student Services, and/or Campus Security. The student(s) of the room being searched should be present if they are available. Such all-encompassing searches are most likely to occur during the week, when most students and the Residence Hall Directors are present.

Searches are completed with discretion in cases where there is reasonable evidence that a person is engaged in illegal activities or behaviors contrary to the College's Code of Conduct, or in emergency situations. For vehicle or locker searches, Campus Security, the student, and/or the Vice President of Student Services will be present during the search, or their designee.

# Understanding Search and Seizure

"Reasonable Cause" or "Just Cause" for a search consists of the following:

- Smoke, whether caused by a fire, a cigarette, incense, candle, or the burning of an illegal substance.
- The strong smell of alcohol or marijuana coming from a residence hall room, vehicle, or locker.
- Considerable evidence, gathered from a variety of sources, regarding possible illegal activity or activity contrary to the College's Code of Conduct in a residence hall room, or vehicle.
- Considerable evidence indicating the presence of a weapon(s) in a residence hall room, locker, or vehicle.
- Considerable evidence indicating an activity in the residence hall, a classroom, vehicle, or locker that potentially threatens the health, safety, and welfare of fellow students (e.g., possible presence of explosives).

This listing is simply to indicate some of the reasons, once confirmed, that would produce "Reasonable Cause" or "Just Cause" for a search. (Please note: This listing is not all-inclusive.) It is not the intent of the College to do unreasonable and unwarranted searches. The only intent of the College is to ensure a safe and secure environment for all who come to learn and work at the College.

I have read and understand the Search and Seizure Policy of Thaddeus Stevens College of Technology.

Date: _____ Print Student's Name: _____

Student's Signature: _____

## Appendix E - Ordering Textbooks

Textbooks can be purchased from HACC Lancaster bookstore, Cengage Unlimited, or other suppliers.

- **Procedures for ordering textbooks from HACC:**
  1. Books may be purchased directly or online from the HACC Lancaster bookstore at: https://bookstore.hacc.edu/.
     - Under "Textbooks," click "Buy/Rent Books."
     - Select the "Select a Campus" link and choose "Stevens Fall 2025" from the drop-down menu.
       - Locate your classes for the Fall 2025 semester. General education classes are listed by subject (e.g., CHEM for Chemistry, ENGL for English).
       - After selecting the appropriate department, course number, and section (choose "ALL"), click "Add Course to List."
       - Repeat this process for additional courses.
       - Once done, click the red "Get Your Books" tab on the right. A list of all textbooks shows.
       - Choose the books to add to your cart and proceed to purchase.
  2. Textbooks can be picked up at the HACC Lancaster Bookstore or delivered to your home address.
  3. A credit card is required to pay for your purchase at the time of selection online.
  4. The hours for the bookstore can be found on the same webpage.

     **NOTE:** When multiple editions of the same book are listed on the HACC website, it means the instructor has approved several editions. You may choose the edition you prefer.

- **Cengage Unlimited:**
  - Cengage Unlimited is an online textbook service. The yearly charge is $170, split between the Fall and Spring semesters: $85 for the Fall and $85 for the Spring.
  - Students in the PreMajor program will be charged $85 for the year.

  Students whose technical programs use Cengage Unlimited will receive access instructions on the first day of classes. Students in MATH 126 will automatically have access to the textbook.

**Contact Information:** If you have any questions or concerns, please contact the Academic Affairs Office via email at: petersen@stevenscollege.edu.

## Appendix F – Student Financial Responsibility Agreement

**Pre-Registration Activity Guide**

Please carefully read the following information. Once you are confident that you understand all the terms and conditions of this Agreement, you may indicate your consent and continue to register for your class(es). You will not be able to proceed with registration activity until you have read and agreed to the terms and conditions of this Agreement.

**My Responsibility**

By signing this Student Financial Responsibility Agreement ("Agreement"), I understand that when I register for class(es) at Thaddeus Stevens College of Technology (“College”), I promise to take full financial responsibility for the payment of all tuition, fees, and other College charges on my student account relating to my enrollment and/or attendance at the College. I understand and agree that the College is permitting me to register for and attend classes without pre-paying tuition in full, in consideration for this Agreement to pay tuition at a future date described below. I understand that, regardless of any expected reliance on any third-party resources, including, but not limited to, financial aid, family resources, employer reimbursement, government assistance, or any other external resources, I remain personally and solely responsible for paying all outstanding balances. I further understand and agree my registration and acceptance of these terms constitutes a contractual agreement in which the College is providing me with educational services, deferring some or all my payment obligations for these services, and I promise to pay for all assessed tuition, fees, and other associated costs by the published or assigned due date. I understand that because of public health related concerns, government pronouncements, or other considerations, the College may need to modify, alter, or substitute the format, process, or methods of providing educational instruction, services, and assessments of student performance, including using video, audio conferences, online tools, or other remote learning options for classes and course work during the semester or other period of enrollment. I understand and acknowledge that any educational instruction may be presented in a variety of formats, and I agree that I will remain responsible to pay the tuition and fees assessed to my student account notwithstanding such modifications.

**Bills**

After I register, I understand that my bill will be made available online, and I will be sent notification of its availability at my college (@Stevenscollege.edu) e-mail address. If I do not receive an e-mail notification, I agree that I am still responsible for the required payment. The current published tuition and fees schedules are listed on the College’s website, *https://www.stevenscollege.edu/admissions/financial-aid/tuition/*, which may be amended from time to time without notice to or consent of the Student, and are incorporated herein by reference. Tuition and fees are subject to change every semester or other period of enrollment.

**IRS Form 1098-T**

I agree to provide my Social Security number (SSN) or taxpayer identification number (TIN) to the College upon request as required by the Internal Revenue Service (IRS) regulations for Form 1098-T reporting purposes. If I fail to provide my SSN or TIN to the College, I agree to pay all IRS fines

assessed because of my missing SSN/TIN. I consent to receive my annual IRS Form 1098-T, Tuition Statement, electronically each year to my college email from the College or the College's 1098-T provider.

**Third-Party Sources of Financial Aid**

If I expect third party sources of financial aid to pay all or part of my financial obligation to the College, I understand that it is my responsibility to meet all requirements of grantors, lenders, employers, and other third parties on a timely basis to ensure disbursement of financial aid to my student account. I understand that if my financial aid is reduced or cancelled for any reason, I remain responsible for any outstanding balance and for reimbursing the College any amounts that I am not eligible to receive.

**Payment Due Date**

I understand there are scheduled due dates for tuition and fees for each semester or other period of enrollment. Due dates are listed on the College's website, *https://www.stevenscollege.edu/admissions/financial-aid/*, which may be amended from time to time without notice to or consent of the Student, and are incorporated herein by reference.

**Assessment of Finance Charges**

I understand the College will assess a $100 late fee on any outstanding balance owed to the College if I fail to pay in full by the due date.

**Tuition Adjustment**

I understand if I do not properly **cancel all my classes** before the first day of the semester or other period of enrollment, I will remain responsible for paying tuition and fees assessed to my student account. Information on cancelling registration can be found on the College's website, *https://www.stevenscollege.edu/academics/registrar/*, which may be amended from time to time without notice to or consent of the Student, and are incorporated herein by reference. I understand if I withdraw from a semester or other period of enrollment, drop classes after the semester or other period of enrollment begins, or am involuntarily removed from classes under a student conduct process, including, but not limited to emergency removal, exclusion, suspension or expulsion after the semester or other period of enrollment begins, I will be responsible for all, or a percentage of the tuition charged. The adjustments of tuition will be made in accordance with The College's ***Tuition Adjustment Policy***, which is incorporated herein by reference***.***

**Placement of Financial Holds**

I understand The College will place a Financial Hold on my student record, to the extent permitted by law, if I fail to pay all charges assessed to my student account by the due date. I also understand this Financial Hold will prevent the release of my academic transcripts and diploma and will prevent me from registration activities such as adding classes for future semesters or other periods of enrollment.

**Billing Disputes**

I understand that if I believe a charge on my bill is incorrect, it is my responsibility to notify the Office

of the Bursar by mailing a letter containing (1) my name and The College student identification number, (2) the dollar amount of the contested charge, and (3) why I believe the charge is incorrect, to: The College Business Office 750 East King Street Lancaster, PA. 17602

**Collection Agency Fees**

I understand and accept if I fail to pay my student account bill or any monies due and owing the College by the scheduled due date and fail to make acceptable payment arrangements to bring my account current. The College may refer my delinquent account to a collection agency. I further understand if The College refers my student account balance to a third party for collection, whether an attorney or collection agency, I will be responsible for any costs (including but not limited to collection fees, attorney's fees, and court costs) associated with attempting to collect the monies due and owing. I understand a collection fee will be assessed and will be due and owing in full at the time of the referral to the third party. The collection fee will be calculated at the maximum amount permitted by applicable law but not to exceed 33.33 percent of the amount outstanding. For purposes of this provision, the third party may be a debt collection company or an attorney. If a lawsuit is filed to recover an outstanding balance, I shall also be responsible for any costs associated with the lawsuit such as court costs or other applicable costs. Finally, I understand that my delinquent account may be reported to one or more of the national credit bureaus.

**Electronic Communication**

I understand and agree the College uses email as an official method of communication with me and that, therefore, I am responsible for reading the emails I receive from the College on a timely basis. I authorize the College and its agents, representatives, attorneys, and contractors (including collection agencies) to contact me at the current or any future mobile phone number, home phone number, and email address I provide, including by way of automated telephone dialing equipment, or artificial or prerecorded voice or text messages, for purposes of collecting any portion of my student financial obligation which is past due.

**Updating Contact Information**

I understand and agree that I am responsible for keeping the College records up to date with my current mailing addresses, email addresses, and phone numbers by following the procedure at https://tsct-ss.colleague.elluciancloud.com/Student, which may be amended from time to time without notice to or consent of the Student, and is incorporated herein by reference. To update my student information at the College, access the ISSS Student Portal and navigate to the "Personal & Program Information" section. Upon leaving the College for any reason, it is my responsibility to provide the College with updated contact information for purposes of continued communication regarding any amounts that remain due and owing to the College.

**Governing Law**

This Agreement will be governed by the laws of the Commonwealth of Pennsylvania and any disputes arising from this Agreement shall be determined in accordance with the law of this jurisdiction. Any suit, action, or proceeding arising in connection with this Agreement must be brought in the courts of Centre County, Pennsylvania, or where federal jurisdiction exists, in the United States District Court

for the Middle District of Pennsylvania.

**Entire Agreement**

This Agreement supersedes all prior understandings, representations, negotiations, and correspondence between the student and the College, constitutes the entire agreement between the parties with respect to the matters described, and shall not be modified or affected by any course of dealing or course of performance.

**Severability**

If any provision, term, or clause of this Agreement is declared by a court of competent jurisdiction to be illegal, unenforceable, or ineffective, this Agreement shall be deemed severable, and all other provisions, terms, and clauses of the Agreement will remain valid and binding on the parties.

I hereby acknowledge I have read this Agreement in its entirety and understand it. By clicking on the I AGREE button below, I am consenting to be bound by this Agreement, for good and valuable consideration, thereby obligating me to pay my outstanding balance, together with all fees and costs set forth above, due to the College.

## Appendix G - Accessibility Services Policy

The Office of Accessibility Services honors the legacy of Thaddeus Stevens by advocating for accessible facilities and services and encouraging all academically qualified individuals with disabilities to achieve their full potential. In compliance with the Americans with Disabilities Act, Amendment Act of 2008, Section 504 and Section 508 of the Rehabilitation Act of 1973, the Accessibility Office supports students with disabilities. In developing the academic, social, and emotional skills necessary for graduation, employment, and manage life challenges.
To receive accommodation, students must register with the Accessibility Office, provide documentation of their disability, and meet with the Accessibility Coordinator.

Disability-related information is confidential and protected by laws such as FERPA and HIPAA. This means that information can only be shared with individuals who have a legitimate need to know, or those designated by the student through a signed release.

**Disclosure:** It is the student's responsibility, not the parent or guardian, to disclose their disability. Disclosure may occur at any time; however, accommodation is not retroactive.
Students requesting accommodations or services due to a disability are required to submit documentation to determine eligibility in accordance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disability Act, and the Amendment Act of 2009. For more information refer to the Office of Accessibility Services website or the Appendix in this document.

The Accessibility Coordinator reviews documentation; accommodations are approved if they do not alter the pace, content or essential skills required for each course and program.
Some accommodations may be available through Universal Design practices or technology. Accommodations are designed to eliminate or reduce disability-related barriers. They do not guarantee success. Disability information is protected under laws such as FERPA and HIPAA, both of which limit the sharing of information to only individuals who have a specific need to know, and to those individuals whom the student has designated through a signed release.
**Disclosure:** The student, not an individual (i.e., parent, guardian, treatment provider) acting on behalf of the student, must disclose the disability. The student may disclose at any time; however, accommodations are not retroactive.

Accommodations may include:

- Accessibility on campus
- Academic: classroom, laboratories, and shop
- Emotional Support Animal (in residential halls only)
- Service Animal
- Dietary
- Residential
- Transportation and parking

All students seeking accommodations must register with the Accessibility Office. Documentation examples for academic accommodations must:

- Be current within the last three years.
- Define the disability.

- Show evidence of the disability affecting a major life activity
- Cite the requested accommodations as they relate to the disability.
- Be from a licensed professional, such as a psychologist, or treating physician.

If a student does not have documentation, or documentation is not current, the Accessibility Coordinator must interview the student to determine eligibility.

An IEP/504 plan and evaluation report from the student's high school from the student's junior or senior year may be used as a form of documentation. IEP and 504s do not carry over to the college. Collection is for documentation purposes only.

**Accommodations Implementation**

- Students meet with the Accessibility Coordinator to develop and sign the Approved Accommodations. Students must acknowledge that they are continuing their approved accommodations at the beginning of each semester for implementation.
- Students forward accommodations to instructors and other individuals who need to know prior to accommodations being provided.
- Student who are approved for an ESA on campus must sign ESA agreement each Fall semester.

The student is responsible for requesting a meeting with the Accessibility Coordinator if they want to change accommodations, discuss accommodations delivery, and any other concerns. The student is also responsible for following through with communication related to accommodations, such as scheduling proctored tests.

Accommodations and support services may be provided by various individuals on campus. The student's signature on the Accommodations form indicates their understanding of procedures to obtain accommodations and acknowledges permission to share information with members of the Retention Team, and those individuals' providing services.

**Note:** If a student is receiving services provided by a community-based provider while they are enrolled, these may be considered accommodations and should be coordinated through the Accessibility Office to assure continuity and appropriate levels of intervention.

**Grievance related to approved accommodations**: If a student disagrees with the Accessibility Coordinator's determination, or questions how accommodations are being provided, they have the right to have the decision or situation reviewed. At this point, the student recognizes and agrees to permit information related to their disability to be shared with faculty, staff, administrators, and legal counsel to determine appropriate action. Below are the steps:

1. Student informs Accessibility Coordinator in writing of request for review. If not resolved at this level, student submits a written request to the Vice President for Student Services or the Vice President for Academic Affairs to review the situation.
2. The administrators review the decision made by the Accessibility Coordinator, along with the student's concerns, and determine if the student's request is denied or approved. Administrators at this step may also consult with legal counsel if needed.
3. A written decision is provided to the student, and a copy electronically stored in their file.
4. The Approved Accommodations form is updated if warranted and redistributed to any other individuals involved in providing accommodations to the student.

## Appendix H – Good Neighbor Standard

**Purpose**

The Good Neighbor Standard aims to foster positive relationships between Thaddeus Stevens College of Technology and the neighborhood residents by promoting mutual respect, understanding and cooperation. It aligns with our College's Mission and Core Values, promoting respect, responsibility, and civic engagement among our students, faculty, and staff.

**Scope**

This Standard applies to all Thaddeus Stevens College faculty, staff, and students. It is in effect within 400 feet of any College property line and any location where College-related activities occur.

**Definition of a Good Neighbor**

A good neighbor is an individual who contributes positively to their community through respectful, considerate, friendly, helpful, and law-abiding behavior.

**Expectations**

Thaddeus Stevens College faculty, staff, and students are encouraged to be a Good Neighbor by demonstrating the following behaviors and expectations:

1. Community Engagement:
   a) Participate in local community events when possible
   b) Volunteer for neighborhood improvement projects
   c) Support local businesses and initiatives

2. Respect for Property and Environment:
   a) Maintain cleanliness of personal and shared spaces
   b) Properly dispose of trash and recycling
   c) Respect private property boundaries
   d) Participate in College-organized neighborhood clean-up events

3. Noise and Disturbance Control:
   a) Observe quiet hours from 10:00pm to 10:00am on weekdays and 12:00am to 10:00am on weekends
   b) Always keep music and other noise at reasonable levels
   c) College will inform neighbors in advance of planned events that may cause additional noise

4. Traffic and Parking:
   a) Obey all traffic laws, including but not limited to speed limits and stop signs
   b) Park in designated areas that state Thaddeus Stevens College Parking and correlate with student parking permits. Parking outside of the designated areas is strongly discouraged and will be subject to municipality ordinances.
   c) Avoid blocking driveways, fire hydrants, or pedestrian walkways
   d) Use College shuttle service, public transportation, or carpooling, when possible, to reduce traffic congestion

5. Safety and Security:
   a) Report suspicious activities to appropriate authorities (campus security 717 391 7225,

Manheim Township Police 717 569 6401) or 911 when needed.
b) Participate in neighborhood watch programs if available.
c) Ensure proper lighting and maintenance of college-owned properties

6. Communication:
a) Maintain open and respectful communication with neighbors
b) Address conflicts or concerns directly and peacefully
c) Inform College administration of any ongoing neighborhood issues as it is the goal that all members of the community are cooperating to build an environment of respect

**Prohibited Behaviors**

In accordance with other College policies, such as student code of conduct or behavior policy, Thaddeus Stevens College faculty, staff, and students are prohibited from engaging in the following sanctionable acts and behaviors:

1. Nuisance Activities:
a) Excessive noise at any time, particularly during quiet hours
b) Public intoxication or disorderly conduct
c) Hosting large, disruptive gatherings without proper permits

2. Property Violations:
a) Littering or improper waste disposal
b) Vandalism or damage to public or private property
c) Trespassing on private property

3. Traffic and Parking Violations:
a) Speeding or reckless driving
b) Parking in unauthorized areas or blocking access
c) Excessive vehicle noise (e.g., loud music, modified exhaust systems)

4. Substance Abuse:
a) Use of illegal drugs
b) Underage drinking
c) Public consumption of alcohol or legal drugs

5. Harassment and Discrimination:
a) Any form of harassment or discrimination against community members
b) Intimidating or threatening behavior Revised August 8, 2024

**Enforcement and Sanctions:**

1. Reporting:
a) Community members can report violations to the College's Office of Student Affairs or Campus Security
b) An online reporting system will be available for convenient submission of complaints

2. Investigation:
a) The Director of Residence Life (or their designee if unavailable) will promptly investigate all reported violations.

b) Investigations may include speaking with both parties, witnesses, and the accusing party.
c) After the investigation into the claims, appropriate sanctions will be imposed on, any party who is found to be in violation of this standard.

3. Sanctions: In accordance with the College's student conduct and/or discipline policy, violations may result in the following sanctions, depending on the severity and frequency of the offense:
   a) Verbal or written warning
   b) Mandatory educational programs on community living
   c) Community service (e.g., 5-20 hours depending on the violation)
   d) Fines (to be used for community improvement projects)
   e) Loss of privileges (e.g., parking, access to certain campus facilities)
   f) Probation
   g) Suspension from College Residence Halls
   h) Suspension or expulsion from the College in severe cases
4. Appeals:
   a) Students may appeal sanctions through due process outlined in the student handbook

**Implementation and Education**

1. Distribution:
   - Include the standard in student, faculty, and staff handbooks
   - Place standard synopsis in welcome package on each bed in residence halls
   - Post the standard on the College website and in campus buildings
   - Distribute standard information during new student orientation and employee onboarding
   - Place reminders of standard in the campus message board rotation
   - Review standard during Residence Life building meetings Revised August 8, 2024
2. Education:
   - Conduct annual workshops on being a good neighbor and communicate expectations
   - Have a poster campaign on campus
   - Provide regular reminders through campus communications
3. Community Outreach:
   - Host annual town-gown meetings to discuss community relations
   - Establish a community advisory board with local resident representation
   - Regularly seek feedback from community members on the effectiveness of the standard
4. Monitoring and Review:
   - Conduct annual reviews of standard effectiveness
   - Track and analyze violation data to identify trends and areas for improvement
   - Adjust the standard as needed based on community feedback and changing circumstances
5. Recognition:
   - Establish a "Good Neighbor of the Month" program to recognize exemplary community members
   - Provide incentives for student organizations that demonstrate outstanding community engagement.

# Definitions

**Academic Advising:** Academic advisors are assigned faculty members who provide information to students regarding registration and the requirements for degree or certification within their program. Email your advisor directly with questions.

**Academic Coaching:** Academic coaches assist with organization, creating a study plan, determining an effective study method, note-taking, and more. Email your academic coach to schedule an appointment or visit the Academic Center at the LRC.

**Academic Seminars:** Academic seminars are available on topics such as Note-Taking, How to Study, Time Management, Test-Taking Strategies, and more. Seminars are presented live and are also available in voice-narrated PowerPoints.

**Asynchronous Online Courses:** Asynchronous courses, delivered through a course management system allowing 24/7 access, do not require students to be online at specific times; instead, students log in regularly at their convenience to keep up with assignments, due dates, etc. The coursework is monitored by the instructor, who provides support as needed. Documented attendance is required for asynchronous online courses.

**Cease and desist order** can be imposed for an interim period pending hearing by the Vice President for Student Services or their designee as a measure to de-escalate a potentially volatile situation between a student and any other party. A cease-and-desist order carries with it the expectation that formal charges have been or will be filed or are deemed in the best interest of the student(s) or College. Continuation of a cease-and-desist order may be included as part of a judicial/student conduct sanction.

**College Suspension**: While a student is suspended from the College, they are not permitted on any of the locations and may not participate in any College-sanctioned extracurricular activities regardless of where they take place (e.g., an away sporting event, student organization activity).

**Community Service/Civic Engagement** is when a student is required to take part in a special program based on their offense. In this case, the student gives time without receiving compensation to an on- or off-campus organization or department. This community service may not be counted for the student's community service as required by the Thaddeus Stevens Grant or other College requirement or expectation.

**Educational Development** means a student is assigned a task or project to enhance understanding about College policies.

**Expulsion**

Suspension is defined as exclusion from the College and/or residence halls for more than five College

Days and may result in permanent expulsion from the College. Prior to the disciplinary hearing and the President's decision, the student may continue attending classes unless, after an informal hearing, it is determined that the student's presence in class would pose a threat to the health, safety, or welfare of others. If a formal hearing cannot be held within the suspension period, the student may be excluded from the College for more than ten days.

**Fire**: Any instance of open flame or other burning in a place not intended to contain the burning or in an uncontrolled manner.

**Fire Drill**: A supervised practice of a mandatory evacuation of a building for a fire.

**Fire-related Death**: Any instance in which a person (i) is killed because of a fire, including death resulting from a natural or accidental cause while involved in fire control, attempting rescue, or escaping from the dangers of a fire, or (ii) dies within one year of injuries sustained because of the fire.

**Fire-related Injury**: Any instance in which a person is injured because of a fire, including an injury sustained from a natural or accidental cause, while involved in fire control, attempting rescue, or escaping from the dangers of the fire.

**Hybrid Courses:** Hybrid courses, combining both in person classroom instruction and asynchronous online instruction, meet in the classroom regularly and are supplemented with online independent study material throughout the week. Classroom and documented online attendance are mandatory for all hybrid courses.

**Intentional Fire**: A fire that is ignited, or that results from a deliberate action, in circumstances where the person knows there should not be a fire.

**Interim Suspension**: The Vice President of Student Services or Director of Residence Life may impose an interim suspension and/or loss of privileges upon any student whose presence on campus constitutes a threat to the safety, welfare, or well-being to himself/herself or to others in the College community. In such cases, a disciplinary hearing shall be scheduled within five College Days if the suspension exceeds ten College Days.

**Loss of Privilege** means a student is not permitted to access any College building, facility, or residence halls, or participate in any College-sponsored event or activity. A student might lose one or more privileges for a period determined by the Vice President of Student Services, the Director of Residence Life, or the President of the College.

**Probation** is when the student is informed in writing that they must show a change in behavior over a specified period. If the student engages in other violations of the College's Code of Conduct during the probationary period, further disciplinary action will be taken, ranging from loss of services to suspension to recommendation for expulsion. The period will not be fewer than fifteen days and

might last up to one calendar year.

**Referral** is when a student is required to seek an evaluation from a College counselor or other professional on- or off-campus. The student is required to pay all costs associated with the referral and must comply with the recommendations made by the person who conducts the evaluation.

**Residence Hall Suspension**: While a student is suspended from the residence hall, they may attend classes; however, the student is not permitted in any residence hall. The student must leave campus after classes during the period of the suspension by 6:00pm or 20 minutes after their last class ends.

**Restitution** is payment for the loss, damage, or other associated costs of the student(s)' behavior, which can include, but is not limited to, medical bills, fines, service fees, or cleanup cost.

**Suspension:** Defined as exclusion from the College and/or residence halls for one to five consecutive College Days. Suspensions are given by the Vice President of Student Services or the Director of Residence Life. In cases of one to five days of suspension, no student shall be suspended until they have been informed of the reasons and given an opportunity to respond to the College official initiating the suspension. Prior notice of the intended suspension need not be given when College personnel determine it that the health, safety, or welfare of the College community is threatened. The President of the College will be notified in writing when the student is suspended. In that case, the student is informed in writing of the suspension. The student's parents, guardians, or sponsors may be informed in writing of this action only upon consultation with the student.

**Synchronous Online Courses:** Synchronous courses require students to receive instruction and interact with their professor and classmates online during regularly scheduled days and times listed. Synchronous classes also include online components such as course materials, homework, and assignments. Online attendance is required for synchronous online courses.

**Undetermined Fire**: A fire for which the cause cannot be determined.

**Unintentional Fire**: A fire that does not involve an intentional human act to ignite or spread fire into an area where the fire should not be.

**Value of Property Damage**: The estimated value of the loss of the structure and contents, in terms of the cost of replacement in like kind and quantity.

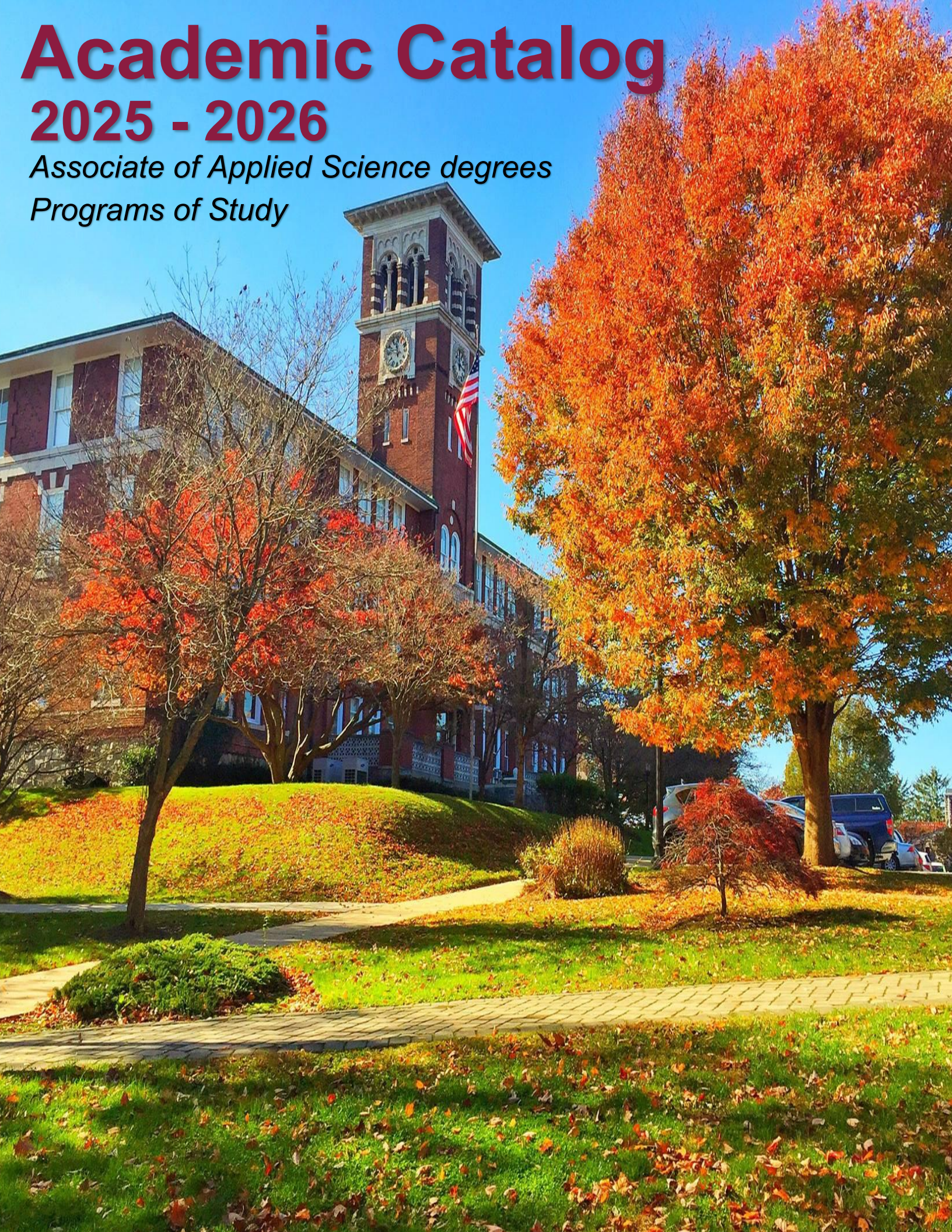
**Warning** means a student is informed in writing of their violation of the Code of Conduct. Further misconduct will result in additional disciplinary action.

# Academic Catalog

## 2025 - 2026

*Associate of Applied Science degrees*

*Programs of Study*



## Mission

Thaddeus Stevens College of Technology educates Pennsylvania's economically and socially disadvantaged as well as other qualified students for skilled employment in a diverse, ever-changing workforce and for full effective participation as citizens.

## Overview of Programs

As part of our commitment to equipping students with the skills and knowledge needed in today's workforce, Thaddeus Stevens College of Technology offers a wide range of technical programs, along with a focused selection of academic programs that enhance and support our hands-on, career-oriented education. Each program aligns with our Institutional Learning Outcomes and supports our mission to provide high-quality education to all qualified students. Below is an overview of our academic offerings for the 2025-2026 academic year.

## Middle States Commission on Higher Education (MSCHE)

Accreditation is a means of maintaining accountability through self-regulation and peer review. The Middle States Commission on Higher Education (MSCHE) reviews institutions in their entirety rather than evaluating individual programs of study. Accreditation means that certain standards of quality and excellence have been met by an institution in areas including, but not limited to, the faculty and academic programs, fiscal planning and processes, and the assessment of students' total educational experience. Simply put, the accreditation process provides assurance that an institution is worthy of the public's trust in producing an educational experience that leads to its stated goals as a postsecondary education provider.

Effectively meeting the MSCHE's standards for accreditation safeguards the College's ability to participate in Title IV Federal Student Aid, which allows our students to access loans and grants issued by the federal government. MSCHE accreditation also permits the transfer of Thaddeus Stevens College's credits to other colleges, along with meeting additional criteria. Further, MSCHE accreditation satisfies employers' requirements for credentials earned from an accredited institution, which serves as an endorsement of the quality of education and training students receive in our programs of study.

## MSCHE Accreditation

Thaddeus Stevens College of Technology (the College) is an accredited institution and a member of the Middle States Commission on Higher Education (MSCHE) www.msche.org.

The College was granted initial accreditation in 1991. The most recent action was in 2017 when MSCHE reaffirmed the College's accreditation. The next evaluation visit is scheduled for 2026. The current Statement of Accreditation Status is available here.

Since 1998, the College has been authorized by the Pennsylvania Department of Education to award the Associate of Applied Science Degree.

## MSCHE Assessment

Thaddeus Stevens College of Technology strives for institutional effectiveness through systematic, ongoing assessment. All assessment is grounded in the mission and institutional learning outcomes. Institutional effectiveness is defined by the College's ability to fulfill its mission through the

commitment of every individual and team to meet established goals and outcomes. The College aligns its assessment process with the MSCHE Standards for Accreditation. The College applies a comprehensive assessment process that assures accountability and sustainability. The process includes assessment at the academic program, course, administrative, and institutional levels. It requires input from key stakeholders throughout the College. The purpose of institutional effectiveness is to ensure continuous improvement.

## Institutional Learning Outcomes (ILOs)

**Effective Communication:** Graduates will communicate effectively in verbal and written language, through technology.
**Quantitative and Scientific Reasoning:** Graduates will apply mathematical and scientific methods and concepts to solve problems and make informed decisions.
**Critical Thinking:** Graduates will apply prior knowledge to question current situations, pose alternatives, objectively resolve problems, and develop new processes.
**Community Engagement:** Graduates will develop the skills to work collaboratively and respectfully as members and leaders of diverse teams and communities.
**Technological Competency:** Graduates will demonstrate technical knowledge and practical application.
**Mastery of Content:** Graduates will exhibit career readiness by demonstrating the critical knowledge and skills required in professional and/or collegiate endeavors.

# Advanced Welding and Fabrication Technology

## What is Advanced Welding and Fabrication Technology?

Advanced Welding and Fabrication Technology provides the student with a working knowledge of the various tools, equipment, and modern techniques used in the metals fabrication, mechanical installation, and welding industries. The proper application of various layout, fabrication, and assembly techniques for specific designs in sheet metal, plate, structural metals and pipe will be stressed. Students will design, estimate, fabricate, and install projects relative to air handling systems and structural and miscellaneous fabricated systems. Proper and safe work habits must be developed due to the nature of the equipment necessary to be successful in the industry.

The understanding and mastery of layout techniques is an essential component for success in the metals fabrication and welding fields. Therefore, disciplines in the basic, parallel line, radial line, and triangulation methods of layout are covered. Also, instruction in blueprint reading relative to the manufacturing and construction industries will be required. Included are components in the drafting, orthographic projection, and symbol interpretation. Gas metal arc, shielded metal arc, gas tungsten arc, oxy-acetylene, and flux core arc welding will be studied and practiced to allow students to obtain skills for a total understanding of fabricated projects from design through the final assembly processes.

Graduates of Advanced Welding and Fabrication and Welding Technology program are prepared to work in businesses and industries that design, build, and install products that have been fabricated from sheet, plate, and structural metals. Areas of employment include the following:

- HVAC sheet metal duct systems fabrication & installation Precision sheet metal layout and fabrication
- Welding
- Industrial maintenance/millwright
- Plate layout/fitter for industrial fabrication
- Mechanical systems estimator/project manager
- Fabrication machinery operator
- Equipment manufacturing and installation
- Structural steel and miscellaneous iron fabrication
- Automated cutting systems operation programming
- Sales - industrial equipment or contractor
- Shop/installation foreperson
- Fabrication of sanitary stainless-steel products
- Food and pharmaceutical processing applications
- Industrial ventilation fabrication and installation

## A Graduate of this Program will be able to:

- Perform technical work in welding, structural steel, sheet metal, and plate fabrication, adhering to OSHA and safety standards.
- Mathematical and Scientific AppUcation: Apply geometry, trigonometry, and physics concepts to develop, layout, fit, and weld varlous metal structures and systems.
- Use hand and power tools correctly and interpret blueprints using orthographic projection practices.
- Project Management and Ethical Business Practices: Maintain accurate project records, estimate costs, and understand ethical business practices in the metals fabrication industry.
- Communication and Leadership: Demonstrate effective oral and written communication skills to foster good business relationships and leadership.
- QuaUtyand Industry Standards: Choose appropriate materials and procedures, understand industry quality standards, and be prepared for the challenges and responsibilities in the metals fabrication industry.

**Joseph Battle, Instructor**
AAS: Thaddeus Stevens College of Technology

**Stacy Gillis, Instructor**
AAS: Thaddeus Stevens College of Technology

**Jim Stewart, Instructor**
BS: Franklin University
AAS: Harrisburg Area Community College

**Christopher Unruh, Instructor**
AAS: Thaddeus Stevens College of Technology

**Model Schedule for**
**Advanced Welding and Fabrication Technology**

| | |
|---|---|
| **Semester 1** | |
| AWFT 106: Gas Metal Arc Welding/Plasma Arc Cutting | 3 |
| AWFT 111: Metals Fab I: Intro to Hand & Machine Processes | 3 |
| AWFT 121: HVAC Duct Design and Fabrication* | 3 |
| AWFT 126: Drafting Fundamentals | 3 |
| MATH 137: Intermediate Algebra (or higher) † | 3 |
| CIS 105: Drawing with Auto Cad* (must take before AWFT 222) | 3 |
| **Semester 2** | |
| AWFT 154: Flux Corded Arc Welding/ Oxy-Acetylene Cutting and Welding* | 4 |
| AWFT 162: Metals Fabrication II: Parallel Line Development Machine Processes* | 4 |
| AWFT 167: Metals Fabrications II: Parallel Line* Development and Machine Processes | 2 |
| AWFT 171: Materials of the Trade and Applied Metallurgy | 2 |
| MATH 132: Elementary Geometry (or higher)* *See Physics Elective for Math Requirement* | 3 |
| CIS 111: Intro to Computer Applications OR FIN 102 Personal Finance | 3 |
| **Semester 3** | |
| AWFT 207: Shielded Metal Arc Welding* | 4 |
| AWFT 212: Metals Fabrication III*: Triangulation Pattern Machine Processes | 4 |
| AWFT 222: Industrial Applications II: CNC Applications and Estimating* | 4 |
| Physics Elective: PHYS 101, PHYS 106, PHYS 207, OR PHYS 213* *(must take MATH 141 for PHYS 207 or PHYS 213)* | |
| ENG 106: English Composition | 3 |
| **Semester 4** | |
| AWFT 257: Gas Tungsten Arc Welding* | 4 |
| AWFT 262: Metals Fabrication IV: Radial Design Development & Machine Processes* | 4 |
| AWFT 267: Industrial Applications III: Print Reading for Welding* | 4 |
| ENG 216: Technical Writing* | 3 |
| Humanities Elective | 3 |
| **Additional General Education Requirements** | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 132, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

# Advanced Welding and Fabrication Technology (AWFT)

### AWFT 106 (3 credits) Gas Metal Arc Welding/Plasma Arc Cutting

Provides a thorough technical understanding of welding safety, gas metal arc welding fundamentals, gas metal arc equipment adjustments, metal transfer, and shielding gases. Provides training to develop the manual skill necessary to make high- quality gas metal arc welds in all positions on mild steel from 1/16" to 3/8" thickness with single and multiple passes, using short circuit transfer, spray transfer, and pulsed spray transfer. Includes learning how to safely operate and program a collaborative robotic welder.

### AWFT 111 (3 credits) Metals Fabrication I: Introduction to Hand and Machine Processes

Introduction to tools, materials, and equipment required to fabricate basic sheet metal projects. Students develop an understanding of seaming, hemming, and fastening techniques. Safety standards according to OSHA are covered.

### AWFT 121 (3 credits) HVAC Duct Design and Fabrication

Introduction to designing and fabricating duct systems relative to low-pressure HVAC systems. Machinery, seaming, connecting, and basic layout techniques will be covered. The course includes the interpretation of applicable SMACNA codes for duct construction.
*Prerequisite: AWFT 111*

### AWFT 126 (3 credits) Drafting Fundamentals

Introduction to drafting and sketching techniques. Major topics include geometric construction, drafting equipment, and orthographic projections. Mechanical drawing required.

### AWFT 154 (4 credits) Flux Corded Arc Welding/ Oxy-Acetylene Cutting and Welding

Offers a technical understanding of Flux-cored arc welding and oxy-acetylene welding, flame cutting, brazing fundamentals, and welding safety. Training for manual skills necessary to produce high-quality welds on mild steel in all positions. Manual and mechanized flame cutting and brazing mild steel are also included.
*Prerequisite: AWFT 111*

### AWFT 162 (4 credits) Metals Fabrication II: Parallel Line Development and Machine

Introduction to the parallel line method of pattern development for fabricating round elbows, tees, and offsets using sheet metal, pipe, and plate materials is covered.
*Prerequisite: AWFT 111*

### AWFT 167 (2 credits) Metals Fabrications II: Parallel Line Development and Machine Processes

Discusses the equipment used in the various fabrication and welding trades, such as sheet and plate products plus structures, tubing, pipe, and the various alloys of steel, aluminum and stainless steel. Included is the application of metals for industrial, commercial, and manufacturing design.
*Prerequisite: AWFT 111*

### AWFT 171 (2 credits) Materials of the Trade and Applied Metallurgy

Covers the common materials, designations, and methods of measurement used in the various fabrication and welding trades. Sheet and plate products plus structures, tubing, pipe, and the various alloys of steel, aluminum, and stainless steel are discussed.

### AWFT 207 (4 credits) Shielded Metal Arc Welding

Provides students with a thorough technical understanding of shielded metal arc welding fundamentals, welding safety, welding machines, and electrode classifications and selections. It also provides training to develop the manual skill necessary to produce high quality shielded metal arc welds in all positions on mild steel from 16 gage to 1" plate with single and multiple passes. The welding process using mild steel electrodes with low hydrogen and iron powder flux coatings while using AC and DC power sources is covered.
*Prerequisite: AWFT 106*

### AWFT 212 (4 credits) Metals Fabrication III: Triangulation Pattern

Developmental and advanced machine processes designed to introduce students to the triangulation method of pattern development. Using this discipline of pattern development, students design, lay out, and fabricate transitions, Y-branches and other irregular fittings related to sheet metal, piping, and miscellaneous plate fabrication according to job specifications. Students also learn advanced machinery set-up techniques relative to the fabrication of components designed using this layout process. Instruction in the use of precision measuring tools, iron workers, press brakes, and saws are also major topics covered.
*Prerequisites: AWFT 111 and AWFT 161*

### AWFT 222 (4 credits) Industrial Applications II: CNC Applications and Estimating

The major objective of this course is to introduce students to aspects of programming and utilizing computer-controlled plasma and oxy-fuel cutting systems. Students use AutoCAD® and MTC ProNest software packages to produce duct, weldment, and miscellaneous profile parts from blueprints, sketches, and field measurements. Programmed parts are then nested and cut on given sheet or plate sizes using state-of-the-art computer numerical control (CNC) systems or plasma cutting system. Layout techniques previously learned for profile programming jobs are utilized. Other topics covered in this course are project management and estimating.
*Prerequisites: AWFT 161 and CIS 105*

### AWFT 257 (4 credits) Gas Tungsten Arc Welding

Provides students with a thorough understanding of gas tungsten arc welding fundamentals, arc characteristics, and welding safety. It provides training to develop the manual skill necessary to make high quality gas tungsten arc welds in all positions on 16- and 11-gage mild steel, 16- and 11-gage aluminum, also 16-gage stainless steel using both alternating and direct current. In addition, material is presented on the weld characteristics of carbon steel, stainless steel, and aluminum. The use of abrasives and other clean-up techniques to produce quality USDA and FDA finishes is covered. Instruction on the use of purging is also given.
*Prerequisite: AWFT 106*

### AWFT 262 (4 credits) Metals Fabrication IV: Radial Design Development and Machine Processes

This course is designed to instruct students in the use of the radial line method of pattern development. Students lay out and fabricate various sheet metal and plate fittings such as cones, reducers, and take-off branches using this technique. Fittings are then welded using processes previously learned.
*Prerequisite: AWFT 111*

### AWFT 267 (4 credits) Industrial Applications III: Print Reading for Welding/ Field Equipment and Rigging

Selected on- and off-campus projects are utilized to reinforce previous instruction. Opportunity to study and to evaluate projects to learn various aspects of industry. Applicable codes and standards are used to ensure proper design and applications of materials and processes are covered. Also included are the interpretation of welding blueprints and applications in field equipment and rigging.
*Prerequisite: AWFT 167*

# Architectural Technology

## What is Architectural Technology?

The profession of architecture touches everyone's life and is central to solving problems in the creation of a built environment. Architectural technicians are problem solvers who work with clients on the design of buildings. They also create plans and specifications that direct the construction of a building and coordinate the work of other professional consultants and engineers.

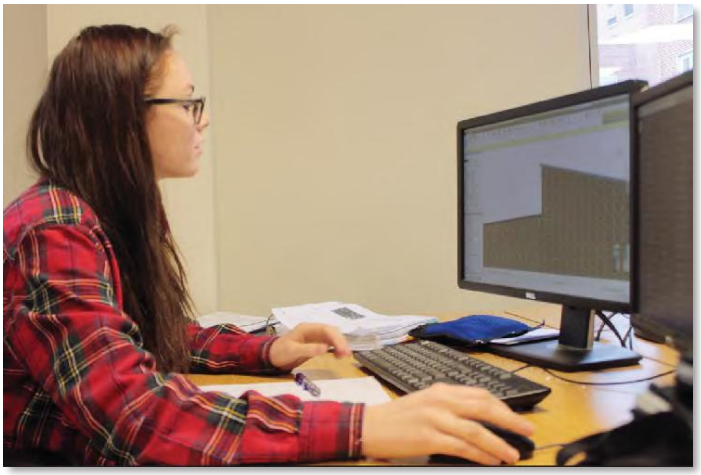
Managing information and responding to the many diverse requirements of governments, building conditions, and society is increasingly important in the construction industry. The architectural profession is rapidly integrating the technology of computers and automation to assist in the management of information and to free up time for creative work.
The instruction in Architectural Technology at Thaddeus Stevens College prepares students to become qualified for employment in the profession and to transfer into architectural programs at accredited colleges and universities. The instruction also provides retraining in technological applications for people currently employed in or reentering the profession.

## A Graduate of this Program will be able to:

- Demonstrate technical proficiency in utilizing industry-standard software and tools for architectural design.
- Apply architectural design principles and methodologies efficiently to create innovative and functional solutions.
- Understand fundamental construction materials, methods, building systems, and structural principles applicable to architectural projects.
- Interpret and apply relevant building codes, zoning regulations, and accessibility standards within the architectural design processes.
- Develop communication skills through visual, written, and oral means, producing comprehensive architectural documentation and presentations suitable for various stakeholders.
- Collaborate effectively within multidisciplinary teams, demonstrating the ability to contribute constructively to project planning, design, and implementation.
- Apply problem-solving, critical-thinking, and mathematical reasoning to analyze architectural challenges, propose creative solutions, and make informed design decisions efficiently.
- Understand ethical responsibilities, professional standards, and the societal impact of architectural decisions.
- Demonstrate the ability to manage projects effectively, optimizing time allocation from conceptualization to execution, considering scheduling and regulatory constraints.
- Engage in lifelong learning, keeping pace with technological advancements, industry trends, and sustainable practices to enhance productivity within the field of architectural technology.

**Jana Belack, Instructor**
M. Arch: Boston Architectural College
BS: Boston Architectural College
AAS: Thaddeus Stevens College of Technology
Registered Architect, The Commonwealth of Massachusetts
Registered Architect, The Commonwealth of Pennsylvania
American Institute of Architects Member
NCARB Certified LEED AP BD+C

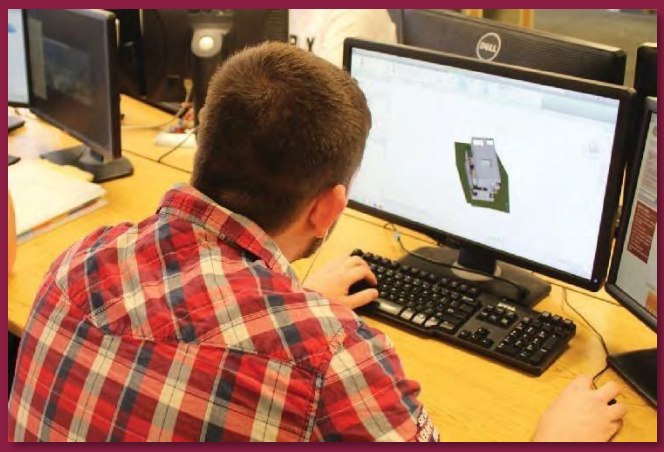
**Tedd R. Williams, Instructor**
BS: Eastern Mennonite University
AAS: Thaddeus Stevens College of Technology
PA L&I: Uniform Construction Code Certification
ICC: Accessibility Inspector/Plans Examiner
Autodesk: AutoCAD Certified Professional



**Schedule for Architectural Technology**

| | |
|---|---|
| **Semester 1** | |
| **ARCH 106: Fundamentals of Architectural Technology** | **3** |
| **ARCH 111: Material of Construction** | **3** |
| **ARCH 124: CAD in Architecture** | **3** |
| **ARCH 157: Construction Specifications** | **3** |
| **MATH 137: Intermediate Algebra (or higher) †^** | **3** |
| **CIS 111: Intro to Computer Applications** | **3** |
| **Semester 2** | |
| **ARCH 116: Residential Details** | **3** |
| **ARCH 162: Working Drawings** | **3** |
| **ARCH 167: Rendering and Illustrations** | **3** |
| **ARCH 172: Advanced CAD in Architecture*** | **3** |
| **MATH 141: Trigonometry (or higher) *** | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 3** | |
| **ARCH 207: Advanced Methods and Materials of Construction*** | **3** |
| **ARCH 212: Structural Systems** | **3** |
| **ARCH 216: Site and Microclimate Design** | **3** |
| **ARCH 262: Life Safety and Building Codes** | **3** |
| **PHYS 207: Statics and Strength of Materials*** | **3** |
| **ENG 216: Technical Writing*** | **3** |
| **Semester 4** | |
| **ARCH 257: Environmental Systems** | **3** |
| **ARCH 267: Architectural History and Theories of Design** | **3** |
| **ARCH 272: Individual Design Studio** | **3** |
| **ARCH 277: Group Design Studio** | **3** |
| **Humanities Elective** | **3** |
| **Additional General Education Requirements** | |
| **Health and Physical Education Elective** | **1** |
| **General Studies Elective** | **3** |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*
*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.*
*^ Minimum Grade Required. See Course Description.*



# Architectural Technology (ARCH)

### ARCH 106 (3 credits)
### Fundamentals of Architectural Technology

Serves as an introduction to architectural technology, which is the application and study of construction technologies, specific to the design of residential building structures. Focuses on the effective and efficient communication of design concepts to all invested stakeholders. In-depth analysis, exploration, and development of individuals' thoughts, through means of graphic representation, to satisfy performance, production, and procurement criteria.

### ARCH 111 (3 credits) Materials of Construction

Presents fundamental aspects of the design profession. Involves the application and technology of materials. An appreciation of the limits and the potential of materials is fundamental to well-executed designs. Investigation and analysis of actual materials and their application to give form and substance to creative ideas.

### ARCH 116 (3 credits) Residential Details

Research of specific building elements necessary for construction. Application of knowledge and creativity in the development of details. Typical and standard details applicable to residential construction. Learning how to communicate with the construction crew. Involves sketch details and drafted details. Also requires drawings and exercises showing typical details and drafting skills.

### ARCH 124 (3 credits) CAD in Architecture

Intensive introduction to Computer-Aided Drafting (CAD) including computer literacy, hardware, software, input, output, printing, introductory computer drafting skills, and completion of specific drawing exercises. Instruction is based on current industry standard software/applications. Use of CAD to draw architectural elements such as floor plans, building sections, exterior elevations, lighting, furniture, and other related elements.

### ARCH 157 (3 credits) Construction Specifications

This course offers an in-depth exploration into the critical role of construction specifications in architectural technology. Students delve into the creation, interpretation, and implementation of detailed construction specifications pivotal in translating design concepts into tangible structures. Students examine the fundamental principles of construction specifications, encompassing materials, methods, and standards utilized in residential construction. Emphasis is placed on industry standards, regulatory compliance, and ethical considerations embedded within construction documentation.

### ARCH 162 (3 credits) Working Drawings

Students design their own houses in this capstone course, creating a complete set of working drawings including site plans, floor plans, elevations, building sections, wall sections, details, and schedules. Students prepare preliminary presentation drawings; create a presentation model and a structural model; and prepare a full set of working drawings. CAD is used to prepare all drawings.

### ARCH 167 (3 credits) Rendering and Illustration

Students learn how to use perspective, color, shadow, and computer-aided animation and rendering to illustrate architectural design. Work in this course builds on skills explored in previous courses.

### ARCH 172 (3 credits) Advanced CAD in Architecture

An intensive follow-up to ARCH 122, this course uses Computer-Aided Drafting (CAD) for efficient production of architectural drawings. Completes the development of a solid foundation of CAD skills, designed to give students an appropriate entry-level skill set.
*Pre-requisite ARCH 122*

### ARCH 207 (3 credits)
### Advanced Methods and Materials of Construction

Detailed investigation of commercial construction systems with a more in-depth review of construction materials than introduced in the first year. Materials considered in a systems approach, including floor, wall, roof, glazing, and finish systems. Selected criteria of cost, installation, long- term material performance, limitations, and whole-building integration are identified for individual materials.

### ARCH 212 (3 credits) Structural Systems
Historical development of structures. Includes the loads and stability of structures. Identifies various stresses, including tension, compression, sheer, and bending. Looks at design requirements, characteristics, limitations, and rules of thumb utilizing wood, steel, and concrete systems; analyzes beams, columns, frames, trusses, and connection components and details in structural design.

### ARCH 216 (3 credits) Site and Microclimate Design
Specifies site parameters and impact on building design from site investigation to finished project. Reviews initial design concerns, site vegetation, terrain, winds, waterways, solar access, and seasonal effects. Building design issues are landscaping, grading and drainage, site utilities, paving and roadways, and site amenities.

### ARCH 257 (3 credits) Environmental Systems
Theory, history, design, and explanation of systems affecting building environmental quality. Includes review of plumbing, water, and sanitary systems; the options available in the selection of heating, ventilating, and air conditioning systems; and an energy overview (thermal control, heat load analysis, utilization of solar alternatives, and understanding of indoor air quality concerns). Electrical equipment requirements and loads, artificial and natural lighting and illumination criteria and fixtures are covered, as well as acoustical control construction practices and vertical transportation impact on building design.

### ARCH 262 (3 credits) Life Safety and Building Codes
Philosophy and approaches to life safety, including fire protection systems and the impact of various types of construction on life safety. Traces evolution of building codes and analyzes the building code compliance of various hypothetical case studies. Covers means of egress and construction system assemblies. Reviews barrier-free design requirements and implication on project design.

### ARCH 267 (3 credit) Architectural History and Theories of Design
Overview of architecture, from prehistoric to the 20th century and beyond, including Ancient, Middle Ages, Renaissance, Eastern, Colonial, and Modern. Stylistic characteristics of historical architecture reviewed and analyzed with specific concentration on American architecture. Includes history of urban design and the current changing face of the building environment, from city and suburb to farm.

### ARCH 272 (3 credits) Individual Design Studio
Utilization of material learned throughout the previous three semesters. Students select commercial/institutional building type and design the entire building, from initial design concept to completion of construction documents. Students are responsible for building programming, square footage requirements, design concept, and integration of site, architectural, structural, mechanical, and electrical considerations. Finished project includes a written building program, construction drawings, outline specification, and presentation graphics.

### ARCH 277 (3 credits) Group Design Studio
Project simulates a real-world approach to professional practice by involving the design of a hypothetical renovation and addition to an existing campus building. Small student teams are responsible for delegating all project tasks and monitoring project deadlines and completion dates. At the end, a group effort includes initial design concept, construction budget estimates, construction drawings, outline specifications, and presentation graphics.

### ARCH 320 (3 credits) Understanding Greece: Art, Architecture History, Mythology
A twelve-day guided tour of architectural sites in Greece. The focus is on understanding the contribution of Greece to Western architecture. Studying architecture exposes students to the social, political, economic, and technological history of Greece. Introductory lectures prepare students before the course, which is offered at the end of the spring term.

### ARCH 340 (3 credit) Understanding Italy's History through Its Art and Architecture
A ten-day guided tour of architectural sites in Italy. The focus is on understanding the contribution of Italy to Renaissance art and architecture. Studying art and architecture exposes students to the social, political, economic, and technological history of Italy. Introductory lectures prepare students before the course, which is offered during the spring break of the spring term.

### ARCH 360 (3 credits) Understanding Spain's History through Its Art and Architecture
A ten-day guided tour of architectural and cultural sites of Spain. The focus is on understanding the contribution of Spain to world of art and architecture. Studying art and architecture exposes students to the social, political, religious, economic, and technological history of Spain. Introductory lectures prepare students before the course, which is offered during the spring break of the spring semester.

# Automotive Technology

## What is Automotive Technology?

Automotive Technology is designed to give students a basic understanding of automotive construction, theory of operation, and standard industry service and repair procedures. This instruction gives them not only the knowledge to perform vehicle service but to develop the skills necessary to diagnose unit malfunctions. Two of the most important skills that will be developed are problem solving and critical thinking.

## A Graduate of this Program will be able to:

- Diagnose and repair common malfunctions of the following automotive systems: engine lubrication and cooling; brake, suspension, steering, wheels and tires, electrical (including wiring, batteries, starting, charging, and ignition), fuel, onboard electronics/computers, and engine assemblies; and power train components including manual and automatic transmissions and transaxles.
- Develop the knowledge and skills to operate the latest generation of computerized test and diagnostic equipment, including digital storage lab scopes, onboard scan tools, and a chassis dynamometer, as well as develop skills in the safe operation of a chassis dynamometer.
- Develop good basic shop habits, including demonstrating a good attendance record, punctuality, a willingness to work, and an ability to work with others as a team.
- Develop sound, basic, and safe automotive shop practice skills, including environmental protection.
- Apply basic laws of physics/scientific principles to automotive systems and components when performing in-shop testing exercises and diagnosing problems. This includes exam questions containing diagnostic questions.
- Record diagnostic testing data and reports using necessary mathematics; solve basic problems using elementary algebra.
- Locate and interpret technical data represented in shop repair manuals, diagnostic charts, and wiring diagrams. This data will be in hard print and/or various electronic media sources.
- Demonstrate good automotive shop management practices, including student management, customer relations, shop procedures, and writing repair orders.
- Prepare to take and pass the ASE automotive tests series after successful completion of this program and having at least one additional year of on-the-job experience in the particular area or areas that will be tested.
- Prepare to accept the challenge of continuous training in the automotive field, that is, learning to learn, which will be necessary to adapt to new technologies and to become a problem solver and a critical thinker.
- Obtain the Pennsylvania Auto Safety Inspection Certificate and the Pennsylvania Emissions tester certificate.

**Martin Christian, Associate Professor**
AAS: Thaddeus Stevens College of Technology
PA Vocational Certificate in Automotive Technology: Penn State University
Certificate of State Inspection Instructor
PA Certificate of Emission Inspection Instructor
PA Certified Emission Repair Technician
ASE Certified Master Technician, A1-A8
ASE Certified Advanced Engine Performance Specialist L1
ASE Certified Master Engine Machinist
ASE Certified Heavy Truck Technician T2 and T6
ASE Certified Under Car Specialist
GM Certified Technician

**Allen Fry, Instructor**
Certificate in Automotive Technology from Penn State University
PA certificate of state inspection
ASE certified A4R Suspension and Steering
ASE certified A5R Brakes
ASE certified A6R Electrical/Electronic System
G1R Automotive Maintenance and Light Repair
GM Certified Technician

**Jeffrey Gieniec, Instructor**
BS: Eastern Mennonite University
AAS: Reading Area Community College
Ford Senior Master Technician
General Motors World Class Technician
PA Safety Inspector Class 1-4 PA Emissions Inspector
PA Emission Repair Technician
ASE G1, A1-A-8 and L1 Master Technician
ASE ETL Program Evaluator

**Naaman Hedge, Instructor**
AAS: Thaddeus Stevens College of Technology

**Model Schedule for Automotive Technology**

| | |
|---|---|
| **Semester 1** | |
| AUTO 106: Automotive Service Fundamentals | 2 |
| AUTO 111: Internal Combustion Engine Service* | 4 |
| AUTO 116: Chassis Service/Steering & Suspension | 3 |
| MATH 126: Technical Math I (or higher) | 3 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 2** | |
| AUTO 156: Automotive Brake Systems | 3 |
| AUTO 161: Automotive Electrical/Electronic Principles | 4 |
| AUTO 166: Engine Electrical/Electronic Principles* | 4 |
| AUTO 171: Fuel and Emission Systems | 4 |
| PHYS 106: Physics for Everyday Life (or higher) | 3 |
| ENG 106: English Composition | 3 |
| **Semester 3** | |
| AUTO 206: Advanced Engine Diagnosis* | 3 |
| AUTO 211: Advanced Chassis Service* | 3 |
| AUTO 216: Independent Diagnosis and Repair | 3 |
| AUTO 223: Pennsylvania Safety Inspection/Enhanced Emissions Inspection Certification | 3 |
| ENG 221: Public Speaking OR ENG 216: Technical Writing* | 3 |
| Humanities Elective | 3 |
| **Semester 4** | |
| AUTO 256: Heating and Air Conditioning | 2 |
| AUTO 261: Drive Train and Manual Transaxle Service | 3 |
| AUTO 266: Advanced Engine Computer Control Analysis | 3 |
| AUTO 271: Automatic Transaxle Service | 4 |
| AUTO 276: Fuel Injection Systems* | 3 |
| General Studies Elective | 3 |
| General Studies Elective | 3 |
| **Additional General Education Requirements** | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **76** |

**** Prerequisite or Co-requisite Required. See Course Description.***
***Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.***

# Automotive Technology (AUTO)

### AUTO 106 (2 credits) Automotive Service Fundamentals

This course presents an overview of the automotive industry, including an introduction to the automobile and its systems. Jobs in the automotive service field are covered as are shop work and service information and how to find it. Electronic information systems Mitchell 1 and ALLDATA are utilized. Safety in the auto shop, including the proper use of basic hand and common power tools, is demonstrated. Environmental protection is taught, including recycling and the proper use and approved disposal methods of common automotive shop chemicals are discussed. Demonstrations and hands-on training in common automotive shop practices, such as tube flaring and thread construction and repair. Fasteners, including torque to yield, are thoroughly covered. Measurement systems, USC and metric, are discussed, including hands-on training using all common automotive precision measurement tools like micrometers, dial indicators, and torque wrenches. The theory and servicing of automotive rolling bearings are covered; wheel bearings are emphasized.

### AUTO 111 (4 credits) Internal Combustion Engine Service

This course covers the basic theory, design, and operating fundamentals of spark ignition piston engines. Extensive mechanical testing and diagnostic procedures are demonstrated, including compression and vacuum testing utilizing wave form analysis with lab scopes. Power balance, including both intrusive and non-intrusive are demonstrated. Running and snap-throttle compression testing are featured. Methods to check valve timing on pushrod and overhead cam engines are demonstrated. Engine lubrication systems and automotive lubricants are studied; diagnostic and test procedures are performed. Engine cooling systems, theory, and standard service procedures are also included. Machining of engine components and restoring of all tolerances are covered. Cylinder head servicing is performed, and the three-angle cut method is used. Complete disassembly, all precession measurements, component servicing, resealing and reassembly on actual engines takes place.
*Prerequisite: AUTO 106*

### AUTO 116 (3 credits) Chassis Service/Steering and Suspension

The basic theory and operating principles of automotive suspension and steering systems are studied; service, repair and diagnostic procedures are featured. Tire and wheel service and computer balancing are performed by students. The Hunter Road Force wheel balancer and vibration solver, Model 9700 is featured. Even the widest tires mounted on the newest custom wheels will be no problem when learning to use the Hunter Model TS3500 tire changer. The safe and proper method of airbag module handling is taught. Wheel alignment principles are covered, including both the simple basic maintenance wheel alignment and the more complicated diagnostic wheel alignment. Complex alignment factors such as tire scrub radius, included angle and steering axis inclination, is covered in depth. Hands-on tire and wheel servicing, pre-alignment inspections, and wheel alignment measurements are taken on live vehicles.

### AUTO 156 (3 credits) Automotive Brake Systems

Modern automotive brake systems and their operating principles are studied and standard repair and service procedures are performed. Drum, disc/drum, and four-wheel disc systems are featured. Power-assist systems and parking brake systems are included. An introduction to the theory and servicing of antilock brake systems, including first generation Bosch type and the newest non-integral systems, are covered. Trouble code retrieval and onboard diagnostics using scan tools is featured.

### AUTO 161 (4 credits) Automotive Electrical/Electronic Principles

The theory of electricity—including Ohm's Law, Kirchhoff's Law, series and parallel circuits, AC and DC current flow—is studied. Basic test meter procedures are featured, and solid state devices, integrated circuits, and on-board microcomputers are explained. Automotive wiring and common automotive accessory systems are studied, and servicing and repair procedures are performed. Automotive batteries, their construction, theory of operation, and standard service procedures are also included. Hands-on extensive electrical system service is performed using digital volt ohm meters and automotive lab scopes. The PDI DVOM, the Fluke 98 Series II, Vetronix Master Tech, and the cutting- edge Vetronix MTS 5100/5200 lab/ignition scopes are all featured. Low resolution amp clamps from Fluke and Vetronix allows students to experience the latest diagnostics using the latest amp-ramping diagnostic procedures. New material has been incorporated into the electrical and fuel and emissions courses after the instructors attended drive ability training/ seminars hosted by such nationally recognized gurus as Jim Linder, Linder Technical Services, Indianapolis; Bill Fulton, Ohio; Jerry Truglia, New York; Dan Marrinucci, Motor Magazine; and Mac Vanden Brink, Michigan.

### AUTO 166 (4 credits) Engine Electrical/Electronic Principles

Cranking circuits and starter motors, charging systems, alternators and voltage regulators, and ignition systems (DIS & EI, including C.O.P./coil on plug) are studied. Simulators are featured to help students better understand system operation. Construction, theory of operation, standard service procedures, and system malfunction diagnosis are covered using the latest test equipment; the new Vetronix MTS 5100/5200 lab scope/engine analyzers, and the Fluke 98 series II is featured. Hands-on comprehensive testing procedures are performed on live vehicles. One of the major goals of this course is for students to gain skills in problem solving through the use of on-car testing and diagnostic procedures. This course culminates with each student performing comprehensive tests on the engine mechanical condition, battery, cranking system, charging system, and the complete ignition system. This is followed by a report analyzing good/bad results.
*Prerequisite: AUTO 111*

### AUTO 171 (4 credits) Fuel and Emission Systems

The principles of fuel systems are studied. Fuel delivery systems and fuel pump testing are covered. The history of emissions control systems, from their inception up to the present, is included. Control system theory and operating principles are studied. Service and testing procedures are demonstrated, and on-car tests are performed on all the major emissions systems. The latest evaporative leak tester smoke machines that use nitrogen is used for training. Standard and feedback carburetor operating principles are still briefly covered. Introduction to alternative fuels, electric, and hybrid vehicles are presented. Highlights of the latest Pennsylvania Emissions Testing procedures is featured, and the groundwork of 5-gas diagnostic testing is laid.

### AUTO 206 (3 credits) Advanced Engine Diagnosis

Covers the use of the Vetronix MTS 5100/5200 Engine Analyzer, Vacutec Leak Detector, and the Mustang Chassis Dynomometer. Theory-related instruction is given on 5-gas analysis and interpreting the results of the analyzer tests with special emphasis on how they relate to advanced diagnosis of ignition, carburetion, fuel injection, charging, cranking, and engine and emission control systems. Demonstrations on hookup and operation are followed by student practice on shop vehicles, and when possible, by repair of client vehicles.
*Prerequisite: AUTO 166*

### AUTO 211 (3 credits) Advanced Chassis Service

The Hunter P611 four-wheel aligner featuring the DSP400 Series Sensors (cameras) and the DSP300 Series Sensors are used in this course. Theory-related instruction is given on alignment with special emphasis on 4-wheel alignment. Disc and drum brake machining along with applying non-directional finishes on the AMMCO brake lathe are covered. On-the-car rotor truing is covered featuring the Pro-Cut PFM-900 Smart Lathe. Demonstrations on hook-up and operation are followed by student practice on shop vehicles, and when possible, by repair of client vehicles.
*Prerequisites: AUTO 116 and AUTO 156*

### AUTO 216 (3 credits) Independent Diagnosis and Repair

Opportunity to diagnose and make repairs on client vehicles in a simulated dealership atmosphere. Experience acting as shop forepersons, using and writing repair orders, ordering parts, and keeping track of hours on the job and using materials. All repairs relate to the courses taken.

### AUTO 223 (3 credits) Pennsylvania Safety Inspection/Enhanced Emissions Inspection Certification

Pennsylvania Department of Transportation Vehicle Equipment and Inspection Regulation /Enhanced Emissions Inspector manuals are covered, as per state requirements. A demonstration of the proper procedure for performing a safety inspection on a vehicle is given. Students practice on shop vehicles. Each student is given the opportunity to take the Pennsylvania Safety Inspection written and performance tests along with the Enhanced Emissions written test and computer- based training/tactile test. The Commonwealth, upon satisfactory completion of these tests, will grant a license for each.

### AUTO 256 (2 credits) Heating and Air Conditioning

Covers the theory of refrigeration and the operating principles of manual and automatic temperature control systems, with special emphasis on diagnosis, service, and repair. Refrigerant recovery, recycling, identification, and recharging techniques on R-12 and R-134a systems are covered in accordance with federal law. The Sun Air-Kare charging station, Everco EREC Recovery/Recycle station, and the Robinair Enivro Charge Combination are featured. Demonstrations given on hookup, operation, and servicing, followed by student practice on shop vehicles, training aids (clutch and seal replacement) and repair of client vehicles.

### AUTO 261 (3 credits) Drive Train and Manual Transaxle Service

Basic operating principles of manual transaxles, differentials, clutches, and universal joints. C-V joints, drive axles, and drive shafts, along with diagnosis and basic service techniques. Demonstrations given on differential set-up, replacing universal and C-V joints, also clutch replacement and adjustment. Students practice disassembly, precision measurements, adjustments and assembly techniques on training aids and work on client vehicles when possible.

### AUTO 266 (3 credits) Advanced Engine Computer Control Analysis

Sensor- related theory, testing procedures, and waveform analysis are studied. OBD-II theory and the related testing procedures are covered. How to use shop manuals to follow manufacturers' procedures for troubleshooting engine drivability problems on computer-controlled cars, along with lab scopes (Fluke 98 Series II), break out boxes, and the Master Tech 3100 hand-held scanner are used to recover trouble codes from the computer's memory and reading sensor stream data. Emphasis is placed on the diagnosis and the interpretation of the results. Students practice on shop vehicles and repair client vehicles when possible.

### AUTO 271 (4 credits) Automatic Transaxle Service

Basic principles of automatic transmissions, including lock-up torque converters, diagnosis, and basic service techniques. Chrysler 40TE electronic transaxle theory is covered. Demonstrations given on pressure checks and shift points, using gauges and a chassis dynamometer. Students practice disassembly, precision measurements, testing, adjustments, and assembly techniques on training aids. Where possible, repair on client vehicles is included.

### AUTO 276 (3 credits) Fuel Injection Systems

The basic operating principles of the Bosch mechanical fuel injection system along with Chrysler and G.M. throttle body and port systems are covered in this course. Special emphasis is placed on diagnosis and service techniques. The EMI-TECH fuel system analyzer is featured. Cleaning a fuel injection system on the vehicle is covered featuring the Bilstein EFI-800 fuel system service center. Students practice on shop vehicles and work on client vehicles when possible.
*Prerequisite: AUTO 171*

# Business Administration

## What is Business Administration?

All employers need highly skilled business personnel to keep their operations running smoothly and successfully. Dynamic careers in business are available in virtually every sector of the economy. Job openings are plentiful, working conditions are comfortable, and opportunities for advancement are within reach for those with a two-year degree.

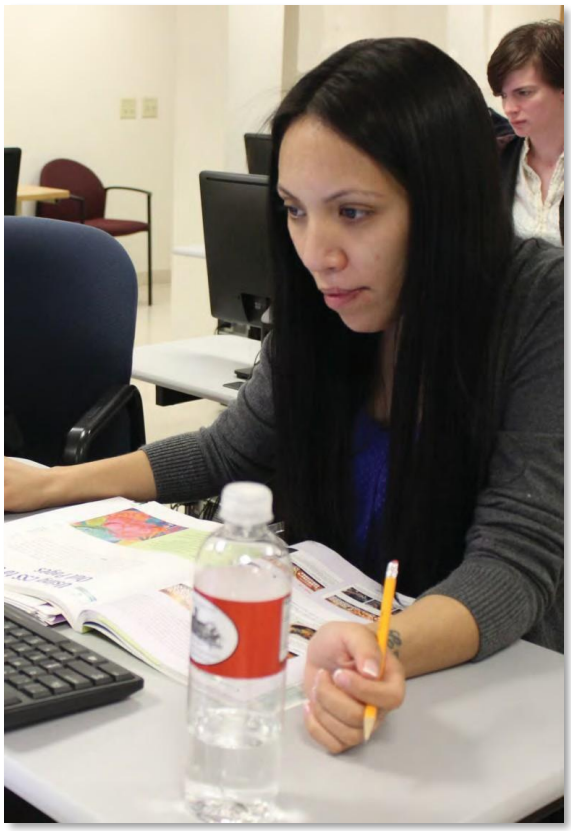
The Business Administration program at Thaddeus Stevens College provides students with the marketable skills, academic background, and experience required to meet the needs of the workforce or transfer to a four-year university. The broad-based curriculum is designed to prepare recent high school graduates or those re-entering the workforce to reach their full potential in many varied business fields. Faculty are focused on training students to manage rapidly changing technology, to lead and motivate others, to prepare and analyze financial information, and to succeed in the global marketplace. Entry-level job titles for recent graduates include sales and service account manager, accounts payable and receivable clerk, administrative assistant, public relations coordinator, operations coordinator, small business owner, human resources assistant/specialist, and facility supervisor.

## A Graduate of this Program will be able to:

- Demonstrate excellent communication skills, including the ability to speak and write clearly and effectively, especially for the business setting.
- Demonstrate an understanding of emerging online technologies and trends and their influence on the electronic commerce marketplace.
- Use critical thinking and mathematical skills to analyze and solve accounting and business math problems.
- Demonstrate advanced keyboarding skills as well as spreadsheet, database management, word processing, and presentation applications.
- Assess and influence behavior among peers, subordinates, and managers; work well as an individual, in groups, and on teams.
- Demonstrate an understanding of the marketer's tasks and knowledge in the principles of how those tasks can be accomplished.
- Investigate the basic practices and principles involved in the administration of a modern business, and evaluate various career paths that may be pursued.
- Predict managerial success by studying the primary theories, principles, and processes of management.
- Demonstrate an understanding of the judicial process and business law in areas such as leases, contracts, and employment law, and how they impact various forms of business organizations.
- Display a general knowledge of the social sciences and understand their effect on the workforce and society.

**Danielle Fox, Assistant Professor**
BBA: Temple University
MBA: LaSalle University

**Bronwyn Laughner, Instructor**
BA: Lycoming College
MBA: Bloomsburg University of Pennsylvania
PhD: Robert Morris University (Pittsburgh)



**Model Schedule for Business Administration**

| | |
|---|---|
| **Semester 1** | |
| BUAD 117: Introduction to Business | 3 |
| BUAD 157: Principles of Marketing | 3 |
| BUAD 160: Principles of Management | 3 |
| BUAD 166: Business Computer Applications I | 3 |
| MATH 137: Intermediate Algebra (or higher) | 3 |
| General Studies Elective | 3 |
| **Semester 2** | |
| BUAD 180: Intro to Corporate Finance | 3 |
| BUAD 190: Intro to Supply Chain Management | 3 |
| BUAD 257: Electronic Commerce | 3 |
| BUAD 266: Business Computer Applications II | 3 |
| Data Analytics* | |
| Science Elective | 3 |
| ENG 106: Composition | 3 |
| **Semester 3** | |
| BUAD 201: Accounting Principles I | 4 |
| BUAD 214: Introduction to Law and Business Law | 4 |
| BUAD 222: Organizational Behavior | 4 |
| BUAD 230: Introduction to Business Ethics | 1 |
| MATH 150: Elements of Statistics | 3 |
| ECON 230: Microeconomics | 3 |
| **Semester 4** | |
| BUAD 251: Accounting Principles II* | 4 |
| BUAD 268: Human Resources Management | 4 |
| BUAD 271: Business Skills Lab | 1 |
| BUAD 277: Business Communications | 4 |
| ECON 240: Macroeconomics | 3 |
| ENG 221: Public Speaking | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **75** |

*** Prerequisite or Co-requisite Required. See Course Description.**
**Students may not take CIS 111 or 211 since this material is covered in BUAD 166 and 266**
**Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed**

# Business Administration (BUAD)

### BUAD 117 (3 credits) Introduction to Business
This course is designed to introduce students to the primary fields of business and to inform them of the various career paths that they may pursue. The basic principles, forms, and practices involved in the administration of a modern business are examined.

### BUAD 157 (3 credits) Principles of Marketing
An interactive approach to guide students in becoming better business people. The skills and responsibilities of planning, producing, pricing, promoting, and distributing are presented as an art and a science through realistic marketing situations and case studies.

### BUAD 160 (3 credits) Principles of Management
This course is designed to prepare BUAD students for management success by studying the primary theories, principles and processes of management. Students will gain valuable insight in issues such as leadership, planning and control, problem solving and creativity, organizational culture and change, ethics and social responsibility, and working in and managing groups.

### BUAD 166 (3 credits) Business Computer Applications I
Microsoft Office programs (Excel®, Access®, PowerPoint®, and Outlook®) are studied in order for students to develop intermediate skills in spreadsheet, database, e-mail, and presentation applications.

### BUAD 180 (3 credits) Introduction to Corporate Finance
This course will cover the fundamental principles of Corporate Finance and explore how companies raise funding, structure capital, and manage investments to maximize stakeholder returns. Students will learn about analyzing cash flows, investing in stocks and bonds, evaluating risk and return, and capital budgeting.

### BUAD 190 (3 credits) Introduction to Supply Chain Management
Introduction to the principles of Supply Chain and Operations Management underlying business today. This course is designed to provide students with an understanding of product and process design, inventory management, logistic networks, demand planning, sales and operations planning, material planning, project management, and sustainability.

### BUAD 201 (4 credits) Accounting Principles I
Introduction to the principles of accounting, the accounting cycle, the interpretation and recording of financial data, and the summarizing and reporting process. Emphasis is on the sole proprietor of a business. This course provides a foundation for further study in the accounting field.

### BUAD 214 (4 credits) Introduction to Law and Business Law
Designed to give students an introduction to the sources of law, judicial process, and an overview of laws including criminal law, tort law, property law (including personal property, real estate, and landlord-tenant law), and wills, estates, and trusts. Also provides a basic understanding of contracts, sales and leases of goods, secured transactions, agency and employment law, and forms of business organizations.

### BUAD 222 (4 credits) Organizational Behavior
This course is a study of workplace behaviors, structures, and processes. Self-analysis and reflection are practiced in small groups through case studies, surveys, and discussion. Motivational theories and leadership styles are surveyed; decision making and business designs and cultures are investigated.

### BUAD 226 (1 credit) Business Skills Lab
Accounting lab for working individually and in groups to complete accounting problems and worksheets. Additional assignments in related business coursework due weekly.

### BUAD 251 (4 credits) Accounting Principles II

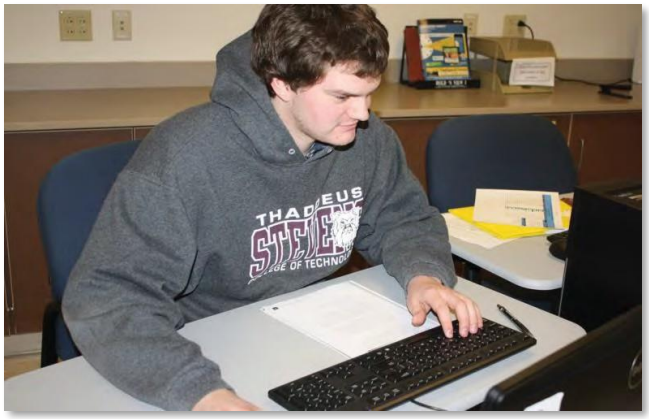
This course is a continuation of Accounting Principles I. Analysis and discussion of more complex financial concepts and statements are conducted.
*Prerequisite: BUAD 201*

### BUAD 257 (3 credits) Electronic Commerce

Overview of emerging online technologies and trends and their influences on the electronic commerce marketplace. Explores nature and impact of e-commerce on business operations, resources, and management. Upon completion of the course, students will have a firm grasp of global e-commerce business trends and the technologies required to implement them.

### BUAD 266 (3 credits) Business Computer Applications II – Data Analytics

Students will learn to examine data, ask the right questions, perform data analysis, and report the results to enhance business decision making. Students will learn data analytics and data visualization skills, along with a mastery of programs such as Microsoft Excel® and Power BI®, and Tableau©. Excel lessons will build on skills learned in BUAD 166 and prepare students to take the Microsoft certification at the intermediate level (MOS Excel©).
*Prerequisite: BUAD 166*



### BUAD 268 (4 credits) Human Resources Management

This course prepares students to work in administrative and management positions and serves as a basis of further study in the field of human resources management. In accordance with suggested Society for Human Resource Management (SHRM) guidelines, both personal competencies and business policies are addressed in this course.

### BUAD 271 (1 credit) Business Skills Lab

Learn the fundamentals of QuickBooks, a popular accounting software, which is used in many small businesses. This program provides an opportunity to reinforce fundamental accounting principles and to learn a computerized approach to handling business transactions.

### BUAD 277 (4 credits) Business Communications

A practice in writing, revising, and editing business communications, including memos, business letters, e-mail messages, reports, web-based information, and job search documents. The ability to convey information in a clear, concise manner is developed along with critical thinking and communication skills.

# Cabinetmaking & Wood Technology

## What is Cabinetmaking and Wood Technology?

Repeated surveys of the woodworking industry have revealed the number one concern facing the industry for the 21st century is the lack of skilled and motivated workers. There is a continual need in the furniture, kitchen cabinet, and architectural millwork industries for persons possessing the skills and knowledge required to produce high quality wood products.

The Cabinetmaking and Wood Technology program is committed to continually providing students with the skills and knowledge required for rewarding jobs in the various woodworking industries. Based upon the belief that students learn best by working on projects, this program is strongly project-oriented.

Hence, students will produce several pieces of fine furniture after which they will further develop and display their skills by producing an advanced wood project of their choosing. Through the use of the College's housing project, students will also learn to list and produce all the millwork items required for a residential house. Additionally, students will design, produce, finish, and install a complete kitchen. Through the use of lectures, demonstrations, and the above projects, the program faculty feel they can best prepare students for careers in any of the three major woodworking fields: fine furniture, architectural millwork, and kitchen cabinetry.

## A Graduate of this Program will be able to:

- Identify nomenclature and the proper use of hand and portable power tools.
- Apply the knowledge of wood as a material in the proper construction of various fine furniture projects.
- Demonstrate safe practice in the use and setup of trade machinery.
- Demonstrate skill in the use of drafting equipment in order to produce shop drawings.
- Read shop blueprints to develop accurate material lists.
- Demonstrate knowledge of finishing materials along with the skills required for wood finishing including the following: wood preparation, wood coloring using various stains, and top coating using oil finishes, shellacs, varnishes, and lacquers.
- Demonstrate the ability to list and prepare millwork items required for various building projects.
- Demonstrate proficiency in grinding knives for the shaper and moulder and the setup of machines for production.
- Demonstrate the ability to produce jigs and fixtures required for production work.
- Demonstrate the skills and knowledge necessary for kitchen layout, design, construction, and installation.
- Develop the skills and knowledge required for producing various types of countertops.
- Develop a strong work ethic along with the ability to work independently and as a contributing member of a team.

**Evan Germann**
BFA: University of Kansas
AAS: Thaddeus Stevens College of Technology
Lancaster Chapter of the PA Guild of Craftsmen

**Jeremiah Polynone, Instructor**
BS: Millersville University
AAS: Thaddeus Stevens College of Technology
AWI Central PA Chapter Board Member
Furniture Society Member
Lancaster Designer Craftsmen
Lancaster Chapter of the PA Guild of Craftsmen

**Model Schedule for**
**Cabinetmaking & Wood Technology**

| | |
|---|---|
| **Semester 1** | |
| CABM 106: Hand Tools and Portable Power Tools | 4 |
| CABM 111: Furniture Construction I | 4 |
| CABM 117: Finishing I | 2 |
| CABM 121: Related Drawing I | 2 |
| †MATH 126: Technical Math I (or higher) | 3 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 2** | |
| CABM 151: Advanced Machinery* | 3 |
| CABM 156: Furniture Construction II* | 4 |
| CABM 162: Finishing II* | 2 |
| CABM 166: Job Management* | 1 |
| CABM 171: Related Drawing II* | 2 |
| CIS 105: Drawing with AutoCad | 3 |
| MATH 132: Elementary Geometry (or higher)* | 3 |
| **Semester 3** | |
| CABM 206: Advanced Wood Project* | 6 |
| CABM 211: Machine Maintenance* | 1 |
| CABM 221: Architectural Millwork* | 4 |
| CABM 226: Custom Woodworking Cutters* | 1 |
| ENG 106: English Composition | 3 |
| Science Elective | 3 |
| **Semester 4** | |
| CABM 251: Shop Operations and Management* | 1 |
| CABM 261: Kitchen Cabinet Planning and Estimating* | 3 |
| CABM 263: Kitchen Cabinet Construction* | 4 |
| CABM 265: Cabinet Installation* | 2 |
| CABM 267: Countertop Fabrication* | 2 |
| Humanities Elective | 3 |
| **Additional General Education Requirements** | |
| Health and Physical Education Elective | 1 |
| General Studies Elective | 3 |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

# Cabinetmaking and Wood Technology (CABM)

### CABM 106 (4 credits) Hand Tools and Portable Power Tools
Students study the wide variety of hand tools, building a thorough foundation in hand tool usage, maintenance, and sharpening. They will learn the basics of hand joinery and develop an understanding for the capabilities and proper usage of portable power tools. This knowledge will be applied to various projects.

### CABM 111 (4 credits) Furniture Construction I
This course provides a foundation for the construction of various types of cabinetry and furniture. The course includes an overview of wood characteristics and joinery methods, assembly, abrasives, adhesives, and veneering basics. Machinery maintenance, safety, and usage is stressed as well. Construction projects will aid in developing an understanding of the subject matter.

### CABM 116 (2 credit) Finishing I
This class focuses on surface preparation and the proper use of finish materials. Various methods of application, including wiping, brushing, and spraying, is addressed. During this introductory course, students apply a wax, shellac, and lacquer finish on the projects completed in class.

### CABM 121 (2 credits) Related Drawing I
An introduction to basic blueprint reading and drafting techniques applicable to the cabinetmaking profession.

### CABM 151 (3 credits) Advanced Machinery
This course teaches the proper set-up and use of the hollow-chisel and slot mortiser, shaper, single-end tenoner, wide-belt sander, and panel saw. The course also provides an in-depth look at the various types of cutters and cutter-heads available for the shaper. Additional machines are added to fit project requirements and available time.
*Prerequisite: CABM 106, CABM 111, and CABM 117*

### CABM 156 (4 credits) Furniture Construction II
Students take a more in-depth look at wood properties, joinery, and construction methods. An emphasis is placed on precision machining techniques and strategies for producing molding and other furniture and case components. Other topics include door and drawer construction and styles, hardware and its applications, and an introduction to furniture styles and types. The construction of various furniture projects help solidify the subject matter.
*Prerequisite: CABM 106, CABM 111, and CABM 117*

### CABM 162 (2 credit) Finishing II
The finishing course involves the final preparation of wood surfaces and the selection and application of appropriate finishing materials. Topics include dyes and pigmented stains, a variety of sealers and top-coating materials, as well as spray finishing techniques.
*Prerequisite: CABM 116*

### CABM 166 (1 credit) Job Management
This course provides an overview of estimating, cost analysis, and methods of job documentation. Students maintain daily time cards as well as job folders for their various furniture projects. Job folders contain drawings; route and cut sheets; time and cost analysis sheets; bill of materials; materials invoice; and a finishing schedule.
*Prerequisite: CABM 111*

### CABM 171 (2 credits) Related Drawing II
A further study into basic blueprint reading and drafting techniques applicable to the cabinetmaking profession as introduced in CABM 121.
*Prerequisite: CABM 121*

### CABM 206 (6 credits) Advanced Wood Project
From an existing plan of their choice, students construct and finish advanced pieces of furniture. This course emphasizes individual planning and problem solving. Students construct their own jigs and fixtures as well as machine set-ups. All projects require an existing set of plans and the approval of the instructor before starting. Students are responsible for supplying the necessary materials, hardware, and finishing supplies required for the project.
*Prerequisites: CABM 111, CABM 151, CABM 156, and CABM 162*

### CABM 211 (1 credit) Machine Maintenance
To develop the skills necessary to grind jointer and planer knives, sharpen shaper cutters, and clean and lubricate a variety of common woodworking machines.
*Prerequisite: CABM 151*

### CABM 221 (4 credits) Architectural Millwork
This course exposes students to the field of custom architectural millwork. Emphasis is placed on students developing an understanding of the Architectural Woodworking Quality Standards as developed by the Architectural Woodwork Institute. A large portion of the course is devoted to live work in which students produce the millwork items required for the housing project and other related campus work.
*Prerequisites: CABM 111, CABM 151, and CABM 156*

### CABM 226 (1 credit) Custom Woodworking Cutters
Students learn how to design, draw, make a template, and grind two matching cutters for the shaper and the moulder.
*Prerequisites: CABM 111, CABM 151, and CABM 156*

### CABM 251 (1 credit) Shop Operations and Management
This course stresses the fundamentals of ordering, purchasing, estimating, scheduling production, and general management techniques.
*Prerequisite: CABM 151*

### CABM 261 (3 credits) Kitchen Cabinet Planning and Estimating
Students learn how to plan, draw, estimate the cost, and list the materials and supplies for the kitchen cabinets and vanities that are used in the housing project.
*Prerequisites: CABM 121 and CABM 171*

### CABM 263 (4 credits) Kitchen Cabinet Construction
As follow-up to CABM 261, this course emphasizes the machining, construction, and finishing of the kitchen cabinets, vanities, and trim used in the housing project.
*Prerequisites: CABM 111, CABM 151, CABM 156, and CABM 206*

### CABM 265 (2 credits) Cabinet Installation
This course involves site preparation and the installation of kitchen cabinets and bathroom vanities. Emphasis is placed on the installation manuals of the National Kitchen and Bath Association (NKBA).
*Prerequisites: CABM 106 and CABM 263*

### CABM 267 (2 credits) Countertop Fabrication
This course involves the fabrication of high pressure plastic laminate and solid surface countertops. Exposure to other types of countertop materials is included.
*Prerequisite: CABM 106*

# Carpentry Technology

## What is Carpentry Technology?

The Carpentry Technology program provides carpentry students with a positive and professional experience. By using the most up-to-date equipment and the newest technology, program faculty always strive to run parallel with the present-day building industry. Students receive 2 years of excellent training that sufficiently prepares` them for the residential and light commercial construction workforce.

## A Graduate of this Program will be able to:

- Write clear, concise, legible, and accurate technical reports and be skilled in oral communication related to the construction industry.
- Demonstrate the basic manipulative skills of the trade that are necessary in laying out work, planning, erecting, and framing.
- Interpret and prepare plans, drawings, codes and specifications, lines, symbols, and abbreviations on working drawings or blueprints.
- Analyze specifications and contract drawings as well as make accurate quantity take-offs and labor estimations to develop an estimated construction cost for a building project.
- Demonstrate the ability to lay out and erect a platform or western frame structure.
- Demonstrate basic knowledge and skill in masonry and in the concrete construction trade.
- Describe various types of materials and methods available to the construction trade.
- Describe business organization, financing, labor relations, selling, pricing, customer service, management, and other business principles.
- Describe the complexity of the building construction industry, the interrelationships of the various trades, and methods of communication and coordination among all trades and professions within the industry.
- Encourage the practice of staying current with any new technology or codes related to the building industry.

**Timothy B. Draper, Instructor**
AAS: Thaddeus Stevens College of Technology
Occupational Safety and Health Administration (OSHA): Construction Safety & Health Certificate

**Daniel McCord, Instructor**
BS: Millersville University of Pennsylvania

**Daniel B. Noel, Assistant Professor**
BS: Lancaster Bible College
AST: Williamson Free School of Mechanical Trades
NCCER Certified Instructor Carpentry Level 4
Occupational Safety and Health Administration (OSHA): Construction Safety & Health Certificate

**Model Schedule for Carpentry Technology**

| | |
|---|---|
| **Semester 1** | |
| **CARP 106: Hand Tools and Power Tools** | **3** |
| **CARP 111: Building Materials** | **3** |
| **CARP 116: Site Work and Foundations I** | **3** |
| **CARP 182: Construction Drawings and Blueprint Reading** | **3** |
| **MATH 126: Technical Math I (or higher) †** | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 2** | |
| **CARP 157: Floor, Wall, and Ceiling Framing** | **3** |
| **CARP 161: Stair Construction** | **2** |
| **CARP 166: Roof Framing and Materials** | **3** |
| **CARP 178: Exterior and Interior Finish** | **4** |
| **CIS 111: Intro to Computer Application** | **3** |
| **MATH 132: Elementary Geometry (or higher)*** | **3** |
| **Semester 3** | |
| **CARP 208: Floor Construction** | **3** |
| **CARP 209: Wall Construction** | **3** |
| **CARP 218: Roof Construction** | **3** |
| **CARP 219: Thermal Insulation** | **1** |
| **CARP 222: Exterior Finish and Trim** | **2** |
| **ENG 216: Technical Writing* OR ENG 221: Public Speaking** | **3** |
| **BUSN 106: Small Business Management** | **3** |
| **Semester 4** | |
| **CARP 227: Drywall Installation and Finish** | **2** |
| **CARP 257: Stair Trim** | **2** |
| **CARP 267: Interior Finish and Trim** | **3** |
| **CARP 272: Site Work and Foundations II** | **2** |
| **CARP 276: Residential Remodeling** | **3** |
| **Humanities Elective** | **3** |
| **Science Elective** | **3** |
| **Additional General Education Requirements** | |
| **Health and Physical Education Elective** | **1** |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 132, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

# Carpentry Technology (CARP)

### CARP 106 (3 credits) Hand Tools and Power Tools
This course is a general introduction to the basic tools that are used by a carpenter with an emphasis on safety, proper usage and procedures, and various applications that are most commonly used in the carpentry trades.

### CARP 111 (3 credits) Building Materials
Covering the wide range of building materials used in carpentry, this course examines the many different types of wood products, including engineered lumber and the newest technology of steel framing. Proper procedures for estimating these building materials and the variety of fastening materials are also discussed and practiced.

### CARP 116 (3 credits) Site Work and Foundations I
In this course, students learn how to set up and operate the transit level and laser level. Building layout and excavation of residential construction will be explained, with particular emphasis on building stake-off. Types of footers, foundations, and concrete forming are also explored. Students will be challenged to practice proper building site layout, constructing concrete stair and sidewalk forms, and installing the form-a-drain system.

### CARP 157 (3 credits) Floor, Wall, and Ceiling Framing
With a strong emphasis on platform framing, students will examine and demonstrate the proper methods of constructing subfloors, walls, and ceilings in the framework of residential and light commercial construction. This includes discussing the basic components and construction methods of light- gauge steel framing.

### CARP 161 (2 credits) Stair Construction
Students learn the different types of stairways and all parts pertaining to them. They also learn how to calculate, lay out, and construct stairway stringers with their proper landings, risers, treads, and railings.

### CARP 166 (3 credits) Roof Framing and Materials
The different types of roof systems and all the material members that are involved in the different roof types are discussed. Students learn theoretically how to calculate rafters to fit their proper situations and practice laying out and cutting common and hip rafters.

### CARP 178 (4 credits) Exterior and Interior Finishes
In this course, students will study and practice installing various types of exterior and interior finish material for residential construction. Exterior finish will include installation procedures for: roofing; siding; soffit; windows and doors; and aluminum trim. Interior finish will include techniques for: hanging drywall; installing prehung doors and door trim; applying trim around a window unit; and other common trim materials.

### CARP 182 (3 credits) Construction Drawing and Blueprint Reading
In this course students will learn the proper techniques necessary to dissect a set of residential blueprints and develop a broad understanding of the language of construction drawings. We will also become involved in duplicating, through the process of mechanical architectural drafting, a few select detailed residential section drawings, with each having different drafting scales.

### CARP 208 (3 credits) Floor Construction
Covers both dimensional and engineered lumber applications. To meet current building designs and codes, students perform installation from a detailed blueprint for sill plates, joists, joist hangers, stair beams, sub flooring, and stair stringer construction.

### CARP 209 (3 credits) Wall Construction
Covers both dimensional and engineered lumber applications. To meet current building designs and codes, students perform installation and layout from a detailed blueprint for wall plates, stud size and spacing, header design and size, and rough opening sizes for window and door schedules.

### CARP 218 (3 credits) Roof Construction
Covers engineered trusses and hand-framed rafters with ceiling joists. The students become familiar with the installation and design criteria of an engineered truss including detailed truss drawings for field applications and the codes applying to field modifications. Students perform layout, cutting, and installing roof rafters from a detailed blueprint including proper ceiling joists, collar ties, and gable overhang construction and codes. Students install roof sheeting and fascia boards.

### CARP 219 (1 credit) Thermal Insulation
Covers the various types of insulation for thermal, noise, and fire protection. Ventilation baffles, vapor barriers, and types of loose fill insulation are detailed. Students perform installation of insulation for wall, ceiling, and fire-stop applications.


### CARP 222 (2 credits) Exterior Finish and Trim
Covers the exterior materials used for siding, roofing, flashing, and aluminum trim. Using accepted methods, students perform siding, soffit, fascia, and fiberglass shingle applications, including proper flashing and counter flashing techniques.

### CARP 227 (2 credits) Drywall Installation and Finish
Covers the types and sizes of drywall installed in construction, as well as proper hanging and finishing. Site techniques are covered. Students perform installation and finishing methods for standard applications.


### CARP 257 (2 credits) Stair Trim
Covers the variety and designs of interior custom stair trim. Students are instructed in the different stair designs, building codes and the perspective trim applications. Students install custom stair trim for an open stair and box stair designs including over the tread skirt board applications.

### CARP 267 (3 credits) Interior Finish and Trim
Covers the various interior painting and staining finishes. The proper wood types and species, finishing methods, and applications are detailed. Details of interior pre-hung doors, window trim including extension jambs and sills are covered. Students perform the installation of a standard trim package.

### CARP 272 (2 credits) Site Work and Foundations II
Covers the details associated with site preparation and foundation inspections for a new building. Specifics are for lot size, set back, right of way, and building location. Work includes using various instruments for batter board installations, excavation of foundation, locating footer elevation, and forming and pouring footers. Locating forming, and pouring of sidewalks and exterior porches.

### CARP 276 (3 credits) Residential Remodeling
Covers the details and techniques used for residential remodeling and restoration. Students perform demolition, and repair and update existing structures to current building codes. The topics covered can include kitchens, bathrooms, flooring and exterior finishes.

# Civil Engineering Construction Technology

## What is Civil Engineering Construction Technology?

The heavy civil engineering construction profession is a dynamic industry that has untapped potential for career advancement, including transformational financial growth. If you like to work outside with your hands, with innovative technology and equipment, civil construction will provide you with countless opportunities. In addition, there will be opportunities for field experience with a summer on-the-job internship.

The Civil Engineering Construction Technology (CECT) program is committed to provide students with a broad range of skills necessary to thrive, and work in an industry that has been around since early civilization. This industry sector continues to grow, offering job security in a wide range of positions, a meaningful career, and an opportunity to help build our country's infrastructure. The combination of theory, and hands-on in both a lab and field portions of this program will allow students to develop the skills to work in the construction of roadways, municipal and state infrastructure, underground utilities, energy, horizontal site development, materials production and application, and construction of water and wastewater infrastructures. Students will learn how to use and make the most of today's innovations, so you will be prepared when you enter the industry full time. Upon competition of the program, graduates will find a wealth of employment opportunities to invest your future, to build a better America.

## A Graduate of this Program will be able to:

- Identify the different types of heavy civil construction projects that include earth moving operations, transportation, infrastructure, utility installation, material production, transportation, water and wastewater plant work, and site development;
- Learn and describe the regulations that impact employee job site safety;
- Demonstrate the ability to read and interpret construction documents including drawings, details, materials, specifications, quality standards and apply to field work,
- Demonstrate pipe work installation skills using different pipe products;
- Explain the importance of pipe work as it relates to underground infrastructure;
- Interpret blueprints, benchmarks, elevations, scaling, survey, and apply this information in civil construction projects;
- Explain material production and uses for asphalt, concrete, aggregates, and precast as well as modes for transporting these products;
- Acquire leadership skills, business communications, basic construction finance to become both an internal and external leader for an organization;
- Differentiate heavy equipment types based on usage, weight, classification, safety, and maintenance;
- Demonstrate skills in quality control using best practice, inspection methods involving civil construction projects;
- Demonstrate good oral communication skills, speak logically, and use various types of oral and written communication techniques to promote sound business, and employer-employee relationships.

**Mitch Kauffman, Instructor**
BS: Kutztown University

**Steve Simes, Instructor**
AS: Thaddeus Stevens College of Technology


**Model Schedule for Civil Engineering Construction Technology**

| | |
|---|---|
| **SEMESTER 1** | |
| CIVL 101: Principles of Civil Engineering Construction Technology | 3 |
| CIVL 105: Job Site & Traffic Safety | 3 |
| CIVL 110: Construction Drawings, Site Plans, Specifications | 3 |
| CIVL 115: Construction Survey I* | 3 |
| ENGLISH 106: English Composition | 3 |
| MATH 126: Technical Math I (or higher) | 3 |
| **SEMESTER 2** | |
| CIVL 150: Erosion & Sediment Control | 3 |
| CIVL 155: Utility Installation I* | 3 |
| CIVL 160: GPS Fundamentals* | 3 |
| CIVL 165: Construction Survey II* | 3 |
| MATH 132: Elementary Geometry (or higher) | 3 |
| CIS 105: Drawing with Auto Cad | 3 |
| **SEMESTER 3** | |
| CIVL 205: Earthwork Fundamentals* | 3 |
| CIVL 210: Engineering Materials and Processes* | 3 |
| CIVL 215: Utility Installation II* | 3 |
| CIVL 220: Site Grading Designs and Grading Types* | 3 |
| ENGLISH 216 Technical Report Writing OR | |
| ENGLISH 222 Public Speaking | 3 |
| Science Elective | 3 |
| **SEMESTER 4** | |
| CIVL 255: Leadership, Ethics, and Legal Issues in Construction Management | 3 |
| CIVL 260: Cost Estimating, Project and Field Construction Management* | 3 |
| CIVL 265: Structured Concrete Operations* | 3 |
| CIVL 270: Asphalt Paving Operations Humanities | 3 |
| Elective* | 3 |
| General Studies Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **74** |

*** Prerequisite or Co-requisite Required. See Course Description.**

**Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.**

# Civil Engineering Construction Technology (CIVL)

### CIVL 101 (3 credits) Principles of Civil Engineering Construction Technology
This course, principles of Civil Engineering Construction Technology, while incorporating scientific principles serves as an introduction to the civil construction industry. The history of the industry's impact on society, past and present has met and will continue to meet our needs well into the future. This acceleration of technology has created one of the most emerging construction career fields in our nation.

### CIVL 105 (3 credits) Job Site and Traffic Safety
This course is designed for students to gain knowledge and technical skills related to best practices for jobsite safety. This includes following all personal protective equipment (PPE), Occupational Safety & Health Administration (OSHA), Mine Safety & Health Standards (MSHA), Department of Transportation (DOT), Maintenance of Traffic Control Devices (MUTCD), and underground utility regulations. Applications will include verbal and nonverbal communication, work zone safety, and injury prevention.

### CIVL 110 (3 credits) Construction Drawings, Site Plans, Specifications
This course provides an overview of construction drawings, plans, details, takeoffs, survey, redlines, cut/fills, conflicts, design issues involving a construction project. Emphasis will be placed on applications for reading and interpreting construction drawings in the field, while ensuring materials, scaling, and specifications complying with local, state and federal requirements.

### CIVL 115 (3 credits) Construction Survey I
This course introduces the history of surveying, use of state-of-the-art equipment and blueprint reading. Students will use survey equipment to layout the jobsite prior to the start of construction. Applications will include reading and understand blueprint.
*Prerequisite: CIVL105*

### CIVL 150 (3 credits) Soil and Erosion Control
This course introduces the history and evolution of erosion & sediment (E&S) control for construction projects. National standards for earth disturbing construction has been determined by the National Pollutant Discharge Elimination System (NPDES). Students will practice construction standards that have improved the quality of tributary streams, wetlands, environment, water quality, and the Chesapeake Bay ecosystem.

### CIVL 155 (3 credits) Utility Installation I
This course introduces the history of utility installation, as well as new technology and advancements. The course introduces the basics of utility installation, materials and tools needed for utility construction. As well as construction including sanitary and storm sewer, water, gas, electric and communication lines.
*Prerequisite: CIVL105 and CIVL 110*

### CIVL 160 (3 credits) Global Positioning System Fundamentals
This course introduces the history and evolution Global Positioning Systems (GPS) technology and its application to civil construction projects. This is an intensive course that builds upon Construction Survey I.
*Prerequisite: CIVL105 and CIVL 110*

### CIVL 165 (3 credits) Construction Survey II
This course builds upon Construction Survey I. Applications includes utilization of construction drawings and equipment including GPS, modeling, drones, total stations, and lasers to layout a construction project.
*Prerequisite: CIVL105 and CIVL 115*

### CIVL 205 (3 credits) Earthwork Fundamentals
This course introduces the history and evolution of earthwork operations. Students will learn differences in soil characteristics, work ability, and treatment for certain soil characteristics. Students will also learn about equipment applications used in earthwork operations.
*Prerequisite: CIVL105 and CIVL 110*

### CIVL 210 (3 credits) Engineering Materials Processes
This course introduces the history and evolution aggregate production, usage and application. Students will also learn usage and manufacturing of aggregate, concrete asphalt, and DOT specifications.
*Prerequisite: CIVL105*

### CIVL 215 (3 credits) Utility Installation II
This course builds on learning in Utility Installation I. Students will learn best practices of safe assembly and installation various types of pipe. Students will understand step-by-step application to assemble pipe per manufacture specifications in excavated trenches.
*Prerequisite: CIVL105 and CIVL 155*

### CIVL 220 (3 credits) Site Grading Designs & Grading Types
This course builds upon Earthwork Fundamentals I. Students will be involved with crew and equipment package setup and planning for efficiency, involved in costs, and production calculations.
*Prerequisite: CIVL105, CIVL 110, and CIVL 165*

### CIVL 255 (3 credits) Leadership in Construction Management, Ethics and Legal Issues

This course will cover a broad range of services construction companies provide to their employees, clients, and general public. The four fundamental principles will include: ethical practice, legal practice, professional excellence, and responsibility to the employee, client, and general public. In addition, students will learn personal leadership styles, good communication and presentation skills, working in a team environment in diverse organizational context.

### CIVL 260 (3 credits) Cost Estimating, Project and Field Construction Management

This course is designed to train students the job estimating fundamentals to determine project construction costs. Construction estimating is tedious, time-consuming and requires a high level of skill. In addition, students will learn to impact of quality management systems (QMS) for company profitability.
*Prerequisite: CIVL110 and CIVL 210*

### CIVL 265 (3 credits) Structured Concrete Operations

This course introduces the history and evolution concrete. Students will learn materials in concrete production processes, and, transporting from plant to jobsite, and placement applications in the construction industry. Emphasis will be place on hands-on preparation, formwork, and finishing.
*Prerequisite: CIVL105 and CIVL 210*

### CIVL 270 (3 credits) Asphalt Paving Operations

This course introduces the history and evolution asphalt. Students learn best safety practices when working on an asphalt paving jobsite. This course "introduces" the student to the asphalt paving practices, materials, and evaluation including demolition and site preparation, laying subbase and a binder layer, laying butt joints, compaction of asphalt, and installing the top layer of asphalt. In addition, students will learn the composition of asphalt and manufacturing processes.
*Prerequisite: CIVL105 and CIVL 210*

# Collision Repair Technology

## What is Collision Repair Technology?

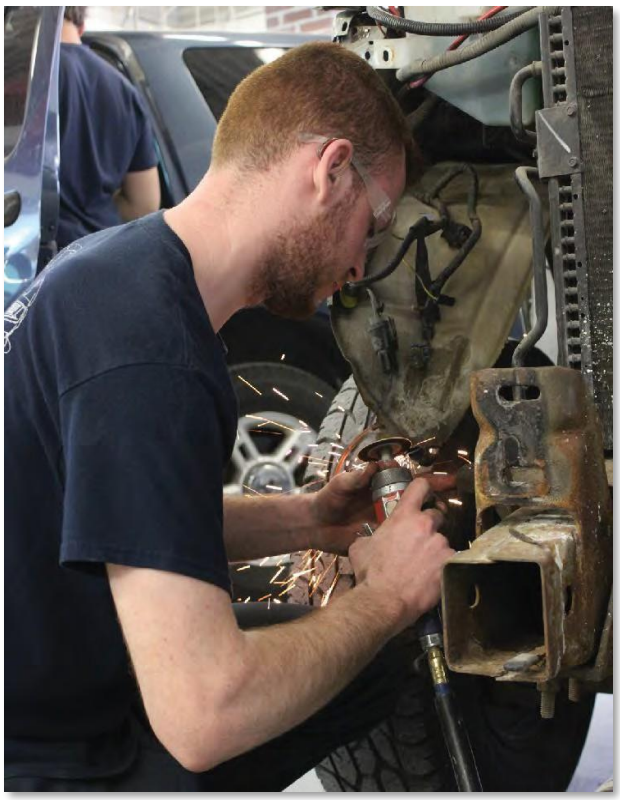
Students will be instructed in a series of I-CAR courses in Non-Structural ProLevel 1 and Refinishing ProLevel 1, the industry standard for collision repair training. Students graduate with a variety of nationally-recognized platinum certificates from I-CAR. This program aligns with collision repair businesses needing to hire employees to maintain or to become I-CAR Gold Class professionals. This program makes students proficient at entry-level tasks. Students also have the opportunity to become certified as ASE Master Technicians. The Collision Repair Technology program is dedicated to providing the most current and complete information, knowledge, and skills required to perform complete, safe and quality repairs. Thaddeus Stevens College of Technology provides students with comprehensive training and industry recognized credentials for a successful career in collision repair.

## A Graduate of this Program will be able to:

- Use collision repair tools and equipment safely and effectively.
- Analyze the structural design of a vehicle and its reaction to an impact.
  - Repair damaged metal.
  - Refinish vehicles.
  - Install panels.
  - Repair frame damage.

**Edwin Ortiz**
BA Digital Marketing - Southern New Hampshire University
AAS Collision Repair and Technology –
Thaddeus Stevens College of Technology

**Jason Weiler, Instructor**
BA: Ashford University
AAS: Thaddeus Stevens College of Technology



**Model Schedule for Collision Repair Technology**

| | |
|---|---|
| **Semester 1** | |
| CORT 107: Details of Body Construction | 4 |
| CORT 111: Collision Repair Welding* | 4 |
| CORT 116: Repairing Damaged Panels and Metalworking* | 4 |
| MATH 126: Technical Math I (or higher) | 3 |
| BUSN 106: Small Business Management | 3 |
| **Semester 2** | |
| CORT 156: Introduction to Refinishing Procedures* | 4 |
| CORT 162: Panel Replacement, Adjustment, Corrosion Protection* | 4 |
| CORT 166: Introduction to Frame Alignment and Repair* | 4 |
| ENG 106: English Composition | 3 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 3** | |
| CORT 212: Estimating Technology* | 4 |
| CORT 222: Aluminum Technology* | 4 |
| CORT 232: Non-Structural Technology* | 4 |
| MATH 111: Business Math | 3 |
| ENG 216: Technical Writing | 3 |
| **Semester 4** | |
| CORT 252: Steel Structural Technology* | 4 |
| CORT 262: Refinishing Technology* | 4 |
| CORT 272: Mechanical Technology* | 4 |
| Humanities Elective | 3 |
| Science Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **73** |

*** Prerequisite or Co-requisite Required. See Course Description.**

**Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.**

# Collision Repair Technology (CORT)

### CORT 107 (4 credit) Details of Body Construction
Different types of automobile bodies and how they are made at the factory. The locations of body joints and parts and the proper methods for parts removal and replacement are also covered.

### CORT 111 (4 credits) Collision Repair Welding
Designed to prepare students in the use of a MIG welder and the various uses of oxyacetylene equipment for cutting and heating to normalize and shrink metal. Proper use of equipment is stressed.

### CORT 116 (4 credits) Repairing Damaged Panels and Metalworking Methods
Use of proper tools and techniques to bend sheet metal. Direct and indirect damage are explained along with ways damage can be corrected.

### CORT 156 (4 credits) Introduction to Refinishing Procedures
Refinishing and the use of tools operated by compressed air. Proper use of various finish materials such as primers, sealers, and thinners. Masking and spray painting techniques are also covered.

### CORT 162 (4 credit) Panel Replacement, Adjustment, and Corrosion Protection
Proper removal and replacement of panels are stressed as well as the proper alignment of panels. A general overview of determining repair procedures, inspecting areas for hidden damage, removal of damaged panels, and corrosion protection.

### CORT 166 (4 credits) Introduction to Frame Alignment and Repair
Frame alignment and straightening is studied, including the use of gauges and frame straightening equipment needed to restore a damaged frame or body to factory specifications.

### CORT 212 (4 Credits) Estimating Technology
Estimators inspect and analyze collision-damaged vehicles to create a repair plan. The technician builds relationships with vehicle owners, repairers, and insurance personnel, ensuring satisfaction when repairs are complete.

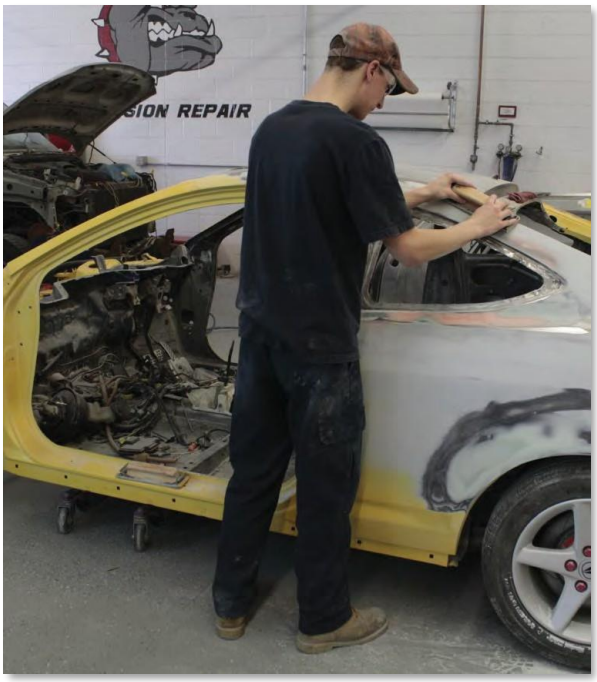
### CORT 222 (4 Credits) Aluminum Technology
An aluminum structural technician restores aluminum structural dimensions and structural integrity to collision damaged vehicles. He or she uses measuring and frame equipment to diagnose, damage, and return damaged frame or uni-body parts to manufacturer's specifications.

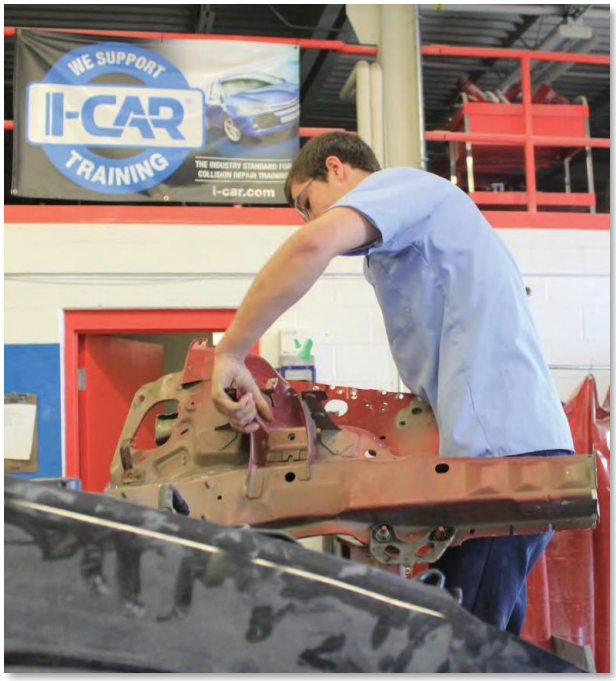
### CORT 232 (4 Credits) Non-Structural Technology
Non-structural technicians restore damaged vehicles to their original structural integrity, function, and appearance. These technicians use hand tools and power tools to remove or repair damaged parts, weld as needed, and properly install new parts. They work with a variety of metals and plastics, as well as glass, electrical, and mechanical parts.

### CORT 252 (4 Credits) Steel Structural Technology
Steel structural technicians restore structural dimensions and integrity to collision damaged vehicles. Technicians use measuring and framing equipment to diagnose damage and return damaged frame or uni-body parts to manufacturer's specifications. Hand tools and power tools are used to remove or repair damaged parts, weld as needed, and properly install new parts. This individual also works with a variety of metals and plastics, as well as glass, electrical, and mechanical parts.

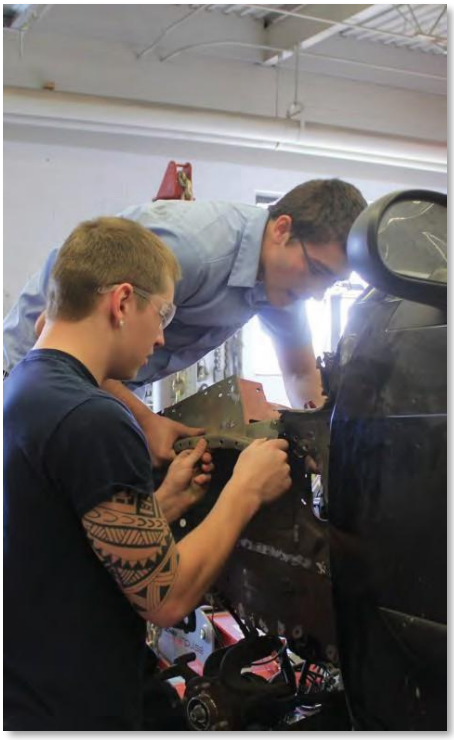
### CORT 262 (4 Credits) Refinishing Technology
Refinish technicians prepare and apply paint to repaired vehicles. Duties may include final sanding, masking, color mixing and tinting, operating spray booths, and applying primers, sealers, color, and clear coats. They may need to blend color into adjacent panels for a better color match to existing vehicle paint. These individuals work with potentially hazardous materials, so attention to safety and personal protection are essential. Vehicles must be correctly prepared and refinished to ensure proper adhesion, color match, and overall appearance.

### CORT 272 (4 Credits) Mechanical Technology
The mechanical technician diagnoses and repairs collision-related mechanical damage which includes steering and suspension systems. Hand tools and power tools are used to remove or repair damaged parts and properly install new and used parts.


SION REPAIR


WE SUPPORT
I-CAR
TRAINING
i-car.com


StateFarm
3M



# Computer & Network Systems Administration

## What is Computer and Network Systems Administration?

The Computer and Network Systems Administration program prepares students for employment in a wide variety of positions in the information technology field. Students work in a live network environment, managing their own servers, clients, routers, and switches by applying concepts learned in the theory classroom. The combination of theory and hands-on lab exercises allows CNSA students to acquire comprehensive skills in the following technical areas: The internal operation of personal and server computer systems; the physical infrastructure of local and wide area networks; the design and management of computer networks; the administration of Microsoft Windows and non-Windows server and client operating systems; the design and development of Windows-based and web-based applications; the management and design of relational databases; and the integration of enterprise software applications to solve business problems.

Upon completion of the program, graduates of the CNSA program have obtained employment in information technology as systems administrators, network administrators, network technicians, PC technicians, help desk analysts, systems engineers, structured data cabling installers, application programmers, web application developers, web administrators, database administrators, and sales engineers. High school prerequisites for this program are Algebra I & II, and a GPA of at least 2.5.

## A Graduate of this Program will be able to:

- Solve business problems by applying sound information technology principles.
- Implement and administer a broad range of information technology systems, networks, and applications.
- Manage information technology projects from conceptualization through implementation.
- Make significant contributions as a member of an information technology team.
- Explain with authority current technologies and standards in the field.
- Maintain information technology skills through appropriate industry certifications and/or continuing education.
- Demonstrate a strong professional work ethic.
- Protect and preserve a business organization's critical information assets from all threats.

**Tim Freund, Instructor**
BS: Western Governors University

**Dr. Jameson McFarlane, Professor**
DSc, Towson University
MBA, BSc: York College of Pennsylvania
Advanced Cybersecurity Certificate: Standford University
Certificate in Music Theory: St. Lucia School of Music
Certificate in Teacher Ed. and Ed. Adm.: Sir Arthur Lewis Community College/University of the West Indies

**Matthew McLaughlin, Instructor**
MPS: Central Penn College
BS: Central Penn College
AAS: Thaddeus Stevens College of Technology

**Rebecca Schultz, Instructor**
MS Ed: University of Phoenix
BS: Kutztown University
AAS: Thaddeus Stevens College of Technology

**Model Schedule for Computer & Network Systems Administration. (Option #1)**

| | |
|---|---|
| **Semester 1** | |
| CNSA 107: PC Hardware and Support Fundamentals | 3 |
| CNSA 108: Operating Systems & Software Fundamentals | |
| CNSA 111: Intro to Networking* | 3 |
| CNSA 117: Analysis of TCP/IP & Local Area Networking* | 3 |
| MATH 137: Intermediate Algebra (or higher) †^ | 3 |
| ENG 106: English Composition | 3 |
| **Semester 2** | |
| CNSA 156: Operating Systems I* | 3 |
| CNSA 161: Systems Administration I* | 3 |
| CNSA 166: Internetworking Devices and Concepts* | 3 |
| CNSA 172: Web Technologies and Network Security Fund | 3 |
| ENG 216: Technical Writing* | 3 |
| MATH 141: Trigonometry (or higher)* | 3 |
| **Semester 3** | |
| CNSA 212: Programming I* | 3 |
| CNSA 222: Database Management Systems* | 3 |
| CNSA 227: Management Information Systems* | 3 |
| CNSA 256: Operating Systems II* | 3 |
| ENG 221: Public Speaking | 3 |
| Humanities Elective | 3 |
| **Semester 4** | |
| CNSA 216: Web Programming* | 3 |
| CNSA 266: Systems Administration II* | 3 |
| CNSA 271: Network Design* | 3 |
| CNSA 276: Practical Applications* | 3 |
| Science Elective | 3 |
| General Education Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| TOTAL CREDITS | 73 |

*** Prerequisite or Co-requisite Required. See Course Description.**
**^ Minimum Grade Required. See Course Description.**

**Model Schedule for Computer & Network Systems Administration. (Option #2)**

| | |
|---|---|
| **Semester 1** | |
| CNSA 107: PC Hardware and Support Fundamentals | 3 |
| CNSA 108: Operating Systems & Software Fundamentals | 3 |
| CNSA 111: Intro to Networking* | 3 |
| CNSA 117: Analysis of TCP/IP & Local Area Networking* | 3 |
| MATH 207: Pre-Calculus† | 4 |
| ENG 106: English Composition | 3 |
| **Semester 2** | |
| CNSA 156: Operating Systems I* | 3 |
| CNSA 161: Systems Administration I* | 3 |
| CNSA 166: Internetworking Devices and Concepts* | 3 |
| CNSA 172: Web Technologies and Network Security Network Security Fund*^ | 3 |
| ENG 216: Technical Writing* | 3 |
| General Studies Elective | 3 |
| **Semester 3** | |
| CNSA 212: Programming I* | 3 |
| CNSA 222: Database Management Systems* | 3 |
| CNSA 227: Management Information Systems* | 3 |
| CNSA 256: Operating Systems II* | 3 |
| ENG 221: Public Speaking | 3 |
| Humanities Elective | 3 |
| **Semester 4** | |
| CNSA 216: Web Programming* | 3 |
| CNSA 266: Systems Administration II* | 3 |
| CNSA 271: Network Design* | 3 |
| CNSA 276: Practical Applications* | 3 |
| Science Elective | 3 |
| General Education Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| TOTAL CREDITS | 74 |

**†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.**

# Computer and Network Systems Administration (CNSA)

### CNSA 107 (3 Credits) PC Hardware and Support Fundamentals

This foundational course introduces students to essential PC hardware and support concepts. Topics include hardware components of both PCs and laptops, mobile devices, basic networking and troubleshooting. This course covers installation, configuration, and maintenance of PCs, laptops, and related hardware along with basic network principles and mobile device support. This course provides students with theory and hands-on lab experience directly related to the CompTIA A+ Core 1 certification exams.

### CNSA 108 (3 Credits) Operating Systems & Software Fundamentals

This course provides students with a comprehensive understanding of operating systems, focusing on core concepts and tasks needed to support current end-user systems. Students will explore installation, configuration, management and troubleshooting of these systems. Emphasis is placed on system maintenance and customer support. This course provides students with theory and hands-on lab experience directly related to the CompTIA A+ Core 2 certification exams.

### CNSA 111 (3 Credits) Introduction to Networking

This course provides a foundational introduction to network technology. Students will learn about the essential principles of networking, including network architecture, topologies, and standards. The course will cover current network models, the functions of network devices, protocols, and logical addresses. Through hands-on labs and theoretical instruction, students will develop an understanding of network infrastructure, cabling, and network data transmission.
*Prerequisite: CNSA 108*

### CNSA 117 (3 Credits) Analysis of TCP/IP and Local Area Networking

This course provides an in-depth exploration of the TCP/IP protocol suite and its role in modern networking. The course focuses on analyzing the structure and operation of TCP/IP within local area networks (LANs). Students will study the layers of the OSI and TCP/IP models, data encapsulation, IP addressing, subnetting, and packet analysis. The course also covers LAN technologies, including Ethernet, Wi-Fi, and VLANs, with an emphasis on practical, hands-on lab experience in configuring and troubleshooting LANs.
*Prerequisite: CNSA 108*

### CNSA 123 (3 Credits) LAN Cabling and WAN Technologies

Cabling standards and best cabling practices in the industry are covered. Students practice hands-on cable termination of copper and fiber cables in the lab. This course also provides an overview of telecommunications technologies and the use of telecommunications in wide area networks (WANs).
*Prerequisite: CNSA 117*

### CNSA 156 (3 Credits) Operating Systems I

This course provides a comprehensive introduction to Microsoft's server operating systems, one of the most widely implemented network operating systems in the IT industry. This course combines in-depth lectures with practical, hands-on labs that build foundational skills in server management. Labs and lectures cover essential topics in network administration, such as attended and unattended installations, cloning and imaging, print server configuration, securing files with share and NTFS permissions, disk management (including RAID configurations), and strategies for disaster recovery and backup. This course prepares students to understand and manage key aspects of Microsoft server environments.
*Prerequisite: CNSA 108*

### CNSA 161 (3 Credits) Systems Administration I

This course introduces students to Microsoft Active Directory structure and management. Students will explore essential concepts in user account maintenance, user profiles, and group policy management. Additionally, the course covers critical networking services, including Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) network services. Through both lectures and hands-on labs, students gain practical experience by creating Active Directory domains and configuring DHCP and DNS services. This course provides students with the skills needed to manage and maintain a networked environment using Microsoft's server technologies.
*Prerequisite: CNSA 156*

### CNSA 166 (3 Credits) Internetworking Devices and Concepts

This is a Cisco-centric course on IP routing and switching. Traditional routers and L3 switches are discussed in the classroom and used in the lab. Routing protocols such as RIPv2, EIGRP, and OSPF are covered. In addition to routing, voice-over IP (VoIP) is a significant technology that businesses implement in order to reduce cost and leverage investments in the data network. For that reason, this course provides an overview of VoIP and assigns a lab project to configure a software private branch exchange (PBX) telephone switch that is capable of routing phone calls within the lab environment.
*Prerequisite: CNSA 161*

### CNSA 172 (3 Credits) Web Technologies and Network Security Fundamentals

This course covers web server configuration, maintenance, and security. HTML and CSS for web page creation are introduced. Through lectures and hands-on labs students will build web pages with HTML and CSS, configure web servers to host multiple websites, and explore common network security topics. Security measures used on the internet including threats, defenses, Public Key Infrastructure (PKI), digital certificates, hash codes, and digital signatures will be covered.

### CNSA 212 (3 Credits) Programming I
An introduction to the fundamentals of computer programming. Students learn a structured, object-oriented approach to problem solving and automating routine processes using modern programming languages. The programming concepts used emphasize logical thinking and current programming standards and conventions. Students learn to plan, design, compile, debug, and document applications in a visual programming environment using a programming language that is compatible with the Microsoft.NET Framework. In addition, the course introduces the integration of programming applications with databases as well as next generation programming environments.
*Prerequisites: CNSA 161*

### CNSA 216 (3 Credits) Web Programming
A course that builds upon the information learned in CNSA 172, CNSA 212, and CNSA 222, it introduces advanced web programming and development techniques and tools. The primary focus of the course is on the design of dynamic, interactive websites, using current web programming languages and tools, including the technology of the Microsoft.NET Framework. Students integrate the use of relational databases to provide data storage and retrieval for their interactive websites. Students also configure and manage web servers to support interactive web pages.
*Prerequisites: CNSA 212*

### CNSA 222 (3 Credits) Database Management Systems
An in-depth, hands-on survey course in which students develop the skills and the expertise required to design, to implement, and to manage databases using a relational database management system (RDBMS). Students learn concepts of the relational database model, the principles of database design and normalization, and database administration. In addition, the basic commands and functions of structured query language (SQL) are used for data manipulation and extraction, as well as for database administration. Finally, topics are introduced that relate enterprise databases to client/server systems, application programming, web database development, and e-commerce.

### CNSA 227 (3 Credits) Management Information Systems
A course that introduces students to the policies and procedures required to administer an enterprise computer network and to support an effective information technology department and users in the enterprise. Students learn how to prepare and to maintain documentation for information technology systems, software, processes, and projects. The skills learned in this course are integrated into the other CNSA courses throughout the sophomore year. An important component of the course is research, readings, and discussion related to ethical practices in the field of information technology.

### CNSA 256 (3 Credits) Operating Systems II
The second operating systems course in the CNSA curriculum that introduces students to the design, functionality, and administration of the predominant non-Windows operating system in the current computer industry. At this particular time, the course presents an in-depth examination of Linux, focusing on the proper installation and administration of the operating system. Students explore the wealth of support sites available to administrators of Linux systems, as well as the availability of productivity software applications and system administration tools for Linux systems.
*Prerequisite: CNSA 156*

### CNSA 266 (3 Credits) Systems Administration II
This is a study of programming languages including variables and strings, software development, data types and expressions, selections and loop statements, arrays and lists, state maintenance and management, functions, semantics, implementation, and database connectivity. Students will explore language features such as formal syntax, scoping and binding of variables, higher- order programming, typing, inheritance, type polymorphism and design techniques. Introduces basics of security attacks and software security. Some of the models of languages may include scripting and dynamic languages such as Python, PHP, etc.

### CNSA 271 (3 Credits) Network Design
This is the first of two capstone courses in the CNSA curriculum that requires students to rely heavily upon the knowledge and skills acquired from their entire previous course experiences. Project teams manage all accounts (i.e., user, group, computer, security) in their respective domains. In designing their enterprise domains, the teams conduct appropriate research; analyze and evaluate enterprise requirements and specifications; and document the network design. Knowledge of the fundamentals of networking technology, experience supporting a network, or successful completion of a networking essentials course is required.

### CNSA 276 (3 Credits) Practical Applications
The second of two capstone courses in the CNSA curriculum that requires students to rely heavily upon the knowledge and skills acquired from their entire previous CNSA course experiences. This course also includes in-depth research and examination of selected network applications and the implementation of those applications in the enterprise. Students learn how to plan, to configure, and to administer the specified application(s); how to implement the application(s); how to document the installation(s); and how to train the appropriate individuals to use and administer the application(s).

# Computer Software Engineering Technology

## What is Computer Software Engineering?

Computers have become a major factor in the development and operation of modern industry. From providing means of communications, to operating machines, to facilitating international commerce, to systems animation, computers and their related software programs makes things possible.

The Computer Software Engineering Technology program prepares students to design, to develop, and to build customized software programs for specific applications. Specifically, students will learn basic programming; how to interpret specifications; application of software architecture, verification and validation principles; and software performance standards. Students will create software programs which address known specifications. The program emphasizes a practical hands-on education as software projects are required each semester.
Upon completion of the program, graduates will find a wealth of employment opportunities in a variety of businesses and industries. Unlike some disciplines which are tied directly to a specific technical area, graduates of this program will work in small businesses, large industries, private organizations, software specialty businesses, IT department, government, and other agencies.

Job titles might include the following:

- Software designers
- Software test technicians
- Software maintenance technicians
- Technical writer for software publishing companies
- Customer service technicians for software companies

## A Graduate of this Program will be able to:

- Edit and modify existing software programs with the aim of upgrading and correcting errors.
- Improve the performance of software programs or adapt it to new and old hardware and software.
- Analyze the needs of users for project design.
- Design and modify software systems for specific applications.
- Analyze and recommend all necessary system layouts and modifications.
- Train users how to make use of new software

**Mainul Chowdhury, Instructor**
BSS: Economics, University of Chittagong
MS: Economics, University of North Texas
MS: Information Science, University of North Texas

**Arafat Hassan, Instructor**
BS: Computer Science, University of Dhaka
MS: Computer Science, University of North Texas
MBA: Finance, University of Dhaka

**Fahim Shams, Instructor**
BS: Computer Science, University of North Texas
MS: Computer Science, Harrisburg University of Science & Technology

**Mohammad Ashraful Huq, Instructor**
BS: Physics, University of Dhaka
MS: Physics, University of Dhaka
MS: Computer Science, Harrisburg University of Science & Technology

**Model Schedule For Computer Software Engineering Technology**

| | |
|---|---|
| **Semester 1** | |
| CSET 105: Intro to Web Applications | 3 |
| CSET 110: Web Development I | 3 |
| CSET 115: Technical Requirements & Data Structures | 3 |
| CSET 120: Software Project I | 3 |
| BUSN 106 Small Business Management | 3 |
| ENG 221: Public Speaking | 3 |
| **Semester 2** | |
| CSET 155 Database Design | 3 |
| CSET 160 Web Development II | 3 |
| CSET 170 Security & Professional Ethics | 3 |
| CSET 180 Software Project II | 3 |
| MATH 137: Intermediate Algebra (or higher) | 3 |
| ENG 106: English Composition | 3 |
| **Semester 3** | |
| CSET 205: Advanced Data Integration* | 3 |
| CSET 222: Database Management Systems* | 3 |
| CSET 210: Workplace Communications | 3 |
| CSET 220: Software Project III | 3 |
| ENG 216: Technical Report Writing* | 3 |
| CIS 111 Introduction to Computer Applications | 3 |
| **Semester 4** | |
| CSET 265: Software Principles | 4 |
| CSET 270: Mobile Development | 4 |
| CSET 280: Capstone Project OR CSET 290: CSET Internship | 4 |
| Health and Physical Education Elective | 1 |
| Humanities Elective | 3 |
| PHYS 106: Physics for Everyday Life OR any CHEM, BIO, SCI, or higher PHYS | 3 |
| **TOTAL CREDITS** | **73** |

*** Prerequisite or Co-requisite Required. See Course Description.**
**Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.**

# Computer Software Engineering Technology (CSET)

### CSET 105 (3 Credits) Introduction to Web Applications
The course provides an introduction to the basic tools, processes, and workflow in the development of web applications with a focus on the JavaScript language. Students will embark on a comprehensive journey into the exciting world of web development, gaining foundational knowledge and practical skills essential for creating dynamic and interactive web applications. The course meets during the first twelve weeks of the semester.

### CSET 110 (3 Credits) Web Development I
The course introduces front end web development concepts including HTML, CSS, and JavaScript, and their role in building web applications. The course meets during the first twelve weeks of the semester.

### CSET 115 (3 Credits) Technical Requirements and Data Structures
The course provides information regarding the process of disseminating specifications and managing a project, as well as data structures concepts. Students will cover various concept of version control, with emphasis on git. The course meets during the first twelve weeks of the semester.

### CSET 120 (3 Credits) Software Project I
This course requires the student to complete a computer software project that employs the skills acquired during that semester. Scheduled during the last three weeks of the semester, the specific projects are those suggested by local employers and advisory committee members. Optional challenge projects are available for those students who wish to tackle complex problems.

### CSET 155 (3 Credits) Database Design
The course develops skills in the administration of databases. Students learn to organize data and to store the data for use and retrieval. Common systems of data storage are introduced. Students will build a database, script a process to load data, and outline how to retrieve data from that database. The course meets during the weeks of the semester.

### CSET 160 (3 Credits) Web Development II
Students will look at server-side development and build more complex web applications using their knowledge gained in CSET 110 (Web Development I). Students will be using Python as their development language for labs and projects in this course. The course meets during the first twelve weeks of the semester.

### CSET 170 (3 Credits) Security and Professional Ethics
The course explores issues of security in software development. Students analyze security problems and learn how they can be minimized or controlled. Students will also cover Secure Socket Layer (SSL) protocol and learn how to apply it to their web applications. The course meets during the weeks of the semester.

### CSET 180 (3 Credits) Software Project II
This course requires the student to complete a computer software project that employs the skills acquired during that semester and previous semesters. Scheduled during the semester, the specific projects are those suggested by local employers and advisory committee members. Optional challenge projects are available for those students who wish to tackle complex problems.

### CSET 205 (3 Credits) Advanced Data Integration

The course is an extension to more complex data operations skills. Students will learn a new programming language called PHP which will be used in creating APIs, interacting with local databases and creating a web application. The course meets during the first twelve weeks of the semester.
*Prerequisite: CSET 155*

### CSET 220 (3 Credits) Software Project III

This course requires the student to complete a computer software project that employs the skills acquired during that semester and previous semesters. Scheduled during the last three weeks of the semester, the specific project is designed by the instructor. Optional features in the project are available for those students who wish to tackle complex problems.

### CSET 222 (3 Credits) Data Management System

An in-depth, hands-on course in which students will develop the skills and the expertise required to design, implement, and manage databases using a relational database management system (RDBMS). Students will learn concepts of the relational database model, the principles of database design and normalization, and database administration. In addition, the basic commands and functions of Structured Query Language (SQL) will be used for data manipulation and extraction, as well as for database administration. *Prerequisite: CSET 155*

## CSET 265 (4 Credits) Software Principles

Students will be introduced to the most fundamental concepts and principles of software that have been used in practical means throughout this program using Java Programming Language. Course may cover topics including fundamentals of programming, object oriented principles and software design patterns. The course meets 16 weeks (including final exams).

## CSET 270 (4 Credits) Mobile Development

In this 16-week project-based course, students will be introduced to mobile application programming concepts and learn to build their own apps. Theory and concepts will be cross-platform, but examples and lab work will focus on one major platform. Topics will include working with Software Development Kits (SDKs), creating user interfaces, and utilizing mobile APIs such as notifications and location-based services.

## CSET 280 (4 Credits) Capstone Project

The capstone project is designed to serve as a culminating experience for students, integrating the knowledge and skills acquired throughout their academic journey. Through this project, students will tackle real-world problems within their chosen field, demonstrating their ability to apply critical thinking, problem-solving, and creativity. The objective is to empower students to independently plan, execute, and present a substantial project, showcasing their proficiency and readiness for professional endeavors or further academic pursuits. Additionally, the capstone project aims to foster collaboration, innovation, and interdisciplinary

learning, preparing students to navigate complex challenges in today's dynamic workforce or academic landscape

## CSET 290 (4 Credits) Internship

The internship course aims to provide students with practical, hands- on experience in their chosen field of study. Through structured internships, students will develop professional skills, gain real-world insight, and build industry connections. The objective is to enhance students' employability by immersing them in authentic work environments, allowing them to apply theoretical knowledge to practical situations. Furthermore, the course aims to cultivate critical thinking, problem-solving abilities, and effective communication skills, essential for success in their future careers. Ultimately, the internship course endeavors to empower students with the confidence and competence needed to transition smoothly from academia to the professional world.

# Computer Integrated Machining

## What is Computer-Integrated Machining?

Students in the Computer-Integrated Machining program will spend considerable time in the study and actual operation of industrial equipment and tools to develop skills used by tool and die making companies and production and manufacturing facilities. This includes emphasis on the set up and operation of computer numerical controlled (CNC) lathes and milling machines. Students will also be introduced to computer- controlled measuring machines and computer-aided design/ computer-aided machining (CAD/CAM) software and its applications. A strong project, method-driven curriculum assures both theoretical and practical skill development.

This program prepares students to enter the workforce fields of CNC, CAM, tool making, mold making, machine tool operating, quality control, industrial sales, and production or manufacturing. High school prerequisites for this program are Algebra I & II, and a GPA of at least 2.5.

## A Graduate of this Program will be able to:

- Demonstrate safe work habits and be conscious of safety when working with machinery.
- Read blueprints, interpret drawings, understand specifications, and establish tolerances.
- Apply mathematics in the machine tool technology (speeds, feeds, thread measurement, sine bar, etc.)
- Apply the principles of physics and metallurgy to the science of heat treatment operations, including hardening of steel, carburizing, case hardening, tempering, and annealing.
- Operate basic machine tools and demonstrate knowledge of their construction in relation to the metal industry.
- Demonstrate skills on computer numerical control machines and in digital readout.
- Operate abrasive cutting machinery; select and plan machining operations on this equipment.
- Demonstrate skills in quality control, inspection, gauging methods, and production control as they relate to manufacturing design and production.
- Demonstrate basic oral communication skills, speak logically, and use various types of oral and written communication techniques to promote good business relationships, to develop leadership, and to establish good employer-employee relationships.
- Demonstrate understanding of CAD/CAM programs for part design and generation of CNC code.

**Jared Keim, Associate Professor**
AAS: Thaddeus Stevens College of Technology
BS: Millersville University of Pennsylvania

**Kyle Young, Instructor**
AAS: Thaddeus Stevens College of Technology

**Model Schedule for Computer-Integrated Machining**

| | |
|---|---|
| **Semester 1** | |
| **CIM 106: Blueprint Reading and Related Math** | **3** |
| **CIM 110: Manufacturing Processes** | **2** |
| **CIM 115: Measurement Systems** | **2** |
| **CIM 118: Lathe and Vertical Milling Machine I** | **4** |
| **CIM 161: Metallurgy** | **2** |
| **MATH 137: Intermediate Algebra (or higher) †^** | **3** |
| **CIS 105: Drawing with AutoCad** | **3** |
| **Semester 2** | |
| **CIM 158: Lathe and Vertical Milling Machine II*** | **3** |
| **CIM 166: Manufacturing Processes II*** | **3** |
| **CIM 176: Computer Numerical Control I*** | **3** |
| **CIM 222: CAD/CAM I*** | **3** |
| **MATH 141: Trigonometry (or higher)*** | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 3** | |
| **CIM 210: CNC Milling*** | **4** |
| **CIM 211: CNC Turning*** | **4** |
| **CIM 220: Geometric Dimensioning & Tolerancing*** | **3** |
| **CIM 272: CAD/CAM II*** | **3** |
| **ENG 216: Technical Writing OR** | |
| **ENG 221: Public Speaking** | **3** |
| **Science Elective: ANY Physics or Chemistry Course** | **3** |
| **Semester 4** | |
| **CIM 228: CAE/CAM*** | **3** |
| **CIM 229: Automation and Production Lab* OR** | |
| **CIM 231: Machine Tool Internship*** | **4** |
| **CIM 259: Advanced CNC Milling and Automation*** | **3** |
| **CIM 269: Advanced CNC Turning and Automation** | **3** |
| **Humanities Elective*** | **3** |
| **Additional General Education Requirements** | |
| **Health and Physical Education Elective** | **1** |
| **General Studies Elective** | **3** |
| **TOTAL CREDITS** | **75** |

** Prerequisite or Co-requisite Required. See Course Description.*
*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*
*^ Minimum Grade Required. See Course Description.*

# Computer-Integrated Machining (CIM)

### CIM 106 (3 credits) Blueprint Reading and Related Math
This course will introduce the student to industrial drawings, basic sketching, and applied mathematics. Interpretation of title blocks, orthographic projection, dimensioning and tolerancing, assemblies, and the elementary application of Geometric Dimensioning & Tolerancing (GD&T) will be covered throughout this course. The skills and knowledge obtained through CIM 106 will prepare the student for application in the machine lab to manufacture machined components.

### CIM 110 (2 credits) Manufacturing Processes
Students will learn laboratory safety and material handling. The physics of metal cutting, and the machinability of metals are introduced. Semi-precision and precision measuring instruments are introduced and practiced. Precision layout, bench grinding, surface grinding and power sawing operations will also be introduced and exercised.

### CIM 115 (2 credits) Measurement Systems
This course will introduce the student to basic metrology including precision layout. The use of indirect and direct measurement instruments including micrometers, calipers, indicators, and various gages will be utilized. Blueprint reading skills, including elementary GD & T, will be necessary for completion of this course.

### CIM 118 (4 credits) Lathe and Vertical Milling Machining I
This course will introduce the student to procedures used on the vertical milling machine and lathe. Course content will include a wide variety of operations including, milling, turning, facing, drilling, reaming, tapping, and calculations related to set up.
*Corequisite: CIM 106*

### CIM 158 (3 credits) Lathe & Vertical Milling Machining II
This course will introduce the student to advanced techniques and procedures used on the vertical milling machine and lathe. Couse content will include offset boring, cutting slots and pockets, taper turning, and thread cutting. An emphasis on workholding will be integrated into this course.
*Prerequisites: CIM 106, CIM 110, CIM 115 and CIM 118 and MATH 137*

### CIM 161 (2 credits) Metallurgy
This course covers the basic principles related to metallurgy. Many industrial processes are clarified as the student gains an understanding of quenching, annealing, case hardening, tempering, and crystallization. In addition, students will see how these changes occur through heat treating projects in the lab. Students will also experience real world applications through industry visits.

### CIM 166 (3 credits) Manufacturing Processes II
This is a lab intensive course which provides students with extensive hands-on training. Assigned projects aid students in gaining critical experience contributing to a well-rounded machining education.
*Prerequisites: CIM 106, CIM 110, CIM 115, CIM 118, CIM 161 and MATH 137*

### CIM 176 (3 credits) Computer Numerical Control (CNC) I
CIM 176 introduces the student to basic CNC concepts such as word-address programming, machine set-up, and program proofing. This course serves as an introduction to CNC machines and CNC programming methods and techniques.
*Prerequisites: CIM 106, CIM 110, CIM 118 and MATH 137*

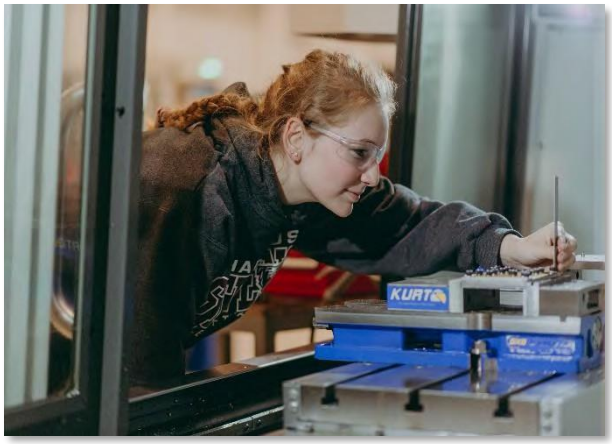
### CIM 210 (4 credits) CNC Milling
This course expands upon introductory concepts learned in CNC I and provides for increased hands-on application of learned material. New programming techniques will focus completely on milling and the use of CNC machining centers. Students are required to complete specific laboratory work to gain confidence in working with CNC Machining Centers.
*Prerequisites: CIM 158, CIM 166, CIM 176, CIM 222.*

### CIM 211 (4 credits) CNC Turning
This course expands upon introductory concepts learned in CNC I and provides increased hands-on application of learned material. New programming techniques will focus completely on turning and the use of CNC turning centers. Students are required to complete specific laboratory work to gain confidence in working with CNC Turning Centers.
*Prerequisites: CIM 158, CIM 166, CIM 176, CIM 222.*

### CIM 220 (3 credits) Geometric Dimensioning & Tolerancing
This course provides the basic elements required to define and apply industry accepted design specifications. The curriculum covers ASME Y.14.5 and associated standards, datum selection, benefits of bonus tolerance, manufacturing and inspection implications when using GD&T. Students will learn the rules, symbolic language and concepts used to define part dimensions and tolerances. As a result, students will increase their productivity due to clear product definition and function based design rationale.
*Prerequisites: CIM 106, CIM 110, CIM 115, and MATH 137*

### CIM 222 (3 credits) Computer-Aided Design and Computer-Aided Machining (CAD/CAM) I
This course introduces the use of Computer Aided Drafting & Computer Aided Manufacturing (CAD/CAM) as a tool for defining part geometry and generating Computer Numerical Control (CNC) machine code. Two-axis and three-axis applications are demonstrated, along with the use of the CAD/CAM applications.
*Prerequisites: CIM 106, CIM 110, CIM 115, and MATH 137.*

### CIM 228 (3 credits) CAE/CAM
This course teaches an intermediate level use of CAE/CAM software for generating code for use on multi-axis machine tools. Parametric modeling will be introduced using Computer Aided Engineering (CAE) software. Students will learn to design and engineer parts for manufacturing and assembly. This course will emphasize the connection between design and machine tool applications.
*Prerequisite: CIM 272, CIM 210, CIM 211, CIM 220*




### CIM 229 (4 credits) Automation and Production Lab
This class focuses on production setups and automation. On the lathe, advanced setups including dual-spindle, Y-axis milling, and the use of live tooling and bar pullers will be studied. On the mill, broaching, 3+2 milling and 5-axis simultaneous milling will be covered and applied. Preparing machined parts for heat-treating and required grinding will be covered in this course.
*Prerequisites: CIM 210, CIM 211, CIM 220, CIM 272, and MATH 137*

### CIM 231 (4 credits) Machine Tool Internship
This course expands upon the intermediate concepts learned in CNC Milling and introduces advanced milling techniques. This course also provides more hands-on experience with those techniques. New milling procedures and cycle time reduction will be the focus of this course. This course will focus on production techniques for CNC Machining Centers, including macro-B programming.
*Prerequisites: CIM 210, CIM 211, CIM 220, and CIM 272*
*Corequisite: CIM 269*


### CIM 259 (3 credits) Advanced Milling & Automation
This course expands upon the intermediate concepts learned in CNC Milling I and introduces advanced milling techniques. This course also provides more hands-on experience with those techniques. New milling procedures and cycle time reduction will be the focus of this course. This course will focus on production techniques for CNC Machining Centers, including macro-B programming.
*Prerequisites: CIM 210, CIM 220, and CIM 272*
*Corequisite: CIM 269*

### CIM 269 (3 credits) Advanced Turning & Automation
Provides the student with additional time to perform specific advanced laboratory exercises in both programming and setup operations on CNC Turning Centers. Programming techniques will focus completely on CNC Turning Centers and will include multi-axis programming, live-tooling, and Swiss-style turning. A greater emphasis will be placed on the incorporation of CAM generated code in the production of finished parts. This class introduces Macro B programming techniques.
*Prerequisites: CIM 211, CIM 220, and CIM 272*
*Corequisite: CIM 259*

### CIM 272 (3 credits) Computer-Aided Design and Computer-Aided Machining (CAD/CAM) II
This course teaches Intermediate-level use of CAM software as a tool for defining part geometry for both lathes and mills. Two axis and three axis application will be demonstrated along with the use of CAD/CAM applications. Three-dimensional surfacing and solids will be taught.
*Prerequisite: CIM 222, CIM 176, CIM 158, and CIM 166*
*Corequisite: CIM 269*

# Diesel Technology

## What is Diesel Technology?

Diesel Technology Program is designed to prepare students to enter the diesel technician career field. This instruction gives an understanding of diesel equipment construction, theory of operation, standard industry service, and repair procedures. This instruction not only provides knowledge to perform equipment repair and service but also develops skills necessary to diagnose malfunctions. Two of the most important skills that will be developed are problem solving and critical thinking.

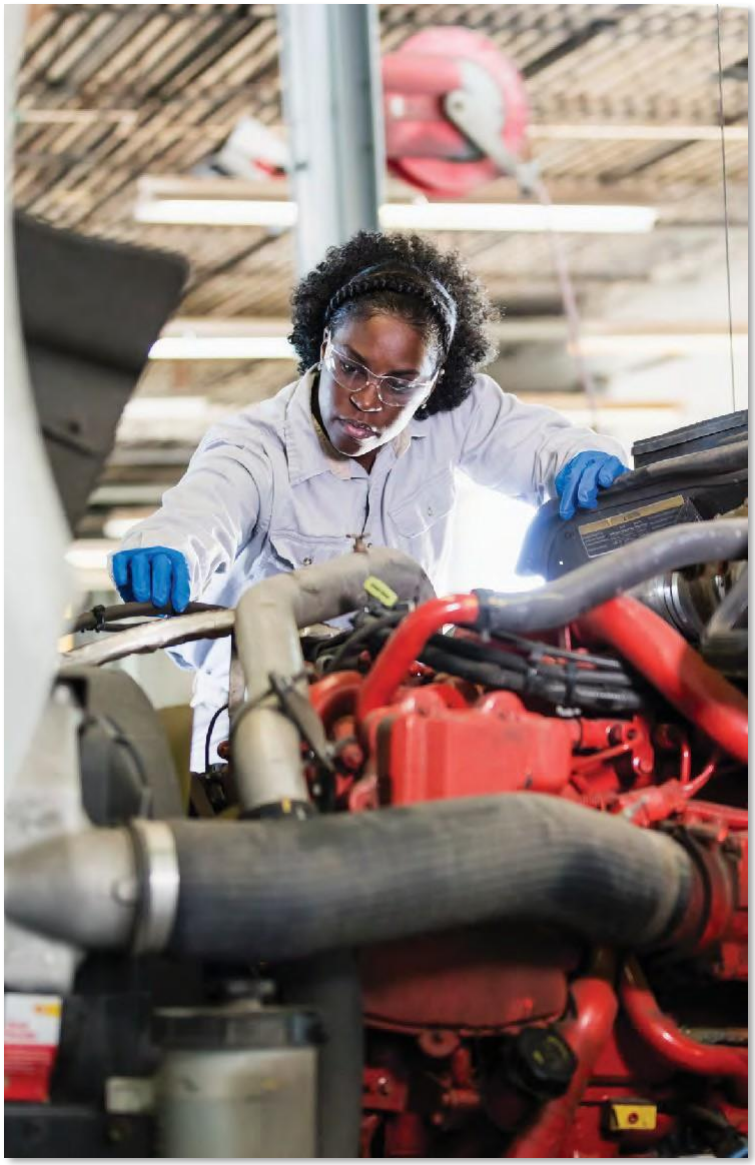
## A Graduate of this Program will be able to:

Diagnose and repair common malfunctions of the following systems:

- Diesel Engine principles and operation, shop operation and tool/equipment usage.
- Diesel Engine – lubrication, cooling, fuel injection systems, mechanical systems, intake and exhaust including turbo chargers.
- Diesel Engine Troubleshooting, Testing, Repair, and Rebuild.
- Medium and Heavy-duty Truck and Equipment electrical/electronic systems.
- Medium and Heavy-duty Vehicle braking systems; hydraulic and air brake systems.
- Steering and suspension systems.
- Drive Train Systems – Including automatic, auto-shift, and manual transmissions; driveline and differentials.
- Preventive Maintenance Inspections
- Basic Hydraulics and Hydraulic Systems
- Heavy Duty HVAC Systems
- Basic welding, oxy-acetylene, plasma, and metal fabrication.
- PA State Cat 3 Inspection and Federal DOT Safety Inspection procedures.
- Develop sound and safe Diesel Shop practice skills, including environmental protection.
- Develop good shop habits, including demonstrating a good attendance record, punctuality, a willingness to work as a team, and a positive attitude toward lifelong learning.
- Apply laws of physics/scientific principles to Diesel Equipment systems and components when performing in-shop testing exercises and diagnostic procedures.
- Record diagnostic testing data and reports using necessary mathematics; solve basic problems using algebra.
- Locate and interpret technical data represented in shop manuals, diagnostic charts, and wiring diagrams. This could be hard copy or electronically driven.
- Demonstrate appropriate Diesel Shop management practices, including management, customer relations, shop procedures, and writing repair orders.
- Prepare to take and pass the ASE Medium and Heavy-Duty Truck Entry Level Certification test series after successful completion of this program. Professional Level Certification can then be taken after only one year of on-the-job experience.
- Prepare to become a lifelong learner. The Diesel Equipment Industry is very fast paced with technology changing daily. Technicians will be constantly upgrading their knowledge and skills. A solid fundamental base is crucial for building these skills.

**Edward Hughes, Instructor**
Associate degree in Specialized Technology: Vale Technical Institute
NC3 Certified Instructor

**Matthew Herr, Instructor**
ASE Master School Bus Technician
ASE Automobile Technician
ASE Master Transit Bus Technician
ASE Advanced Level Specialist
ASE Master Medium/Heavy Truck Technician
AAS: Thaddeus Stevens College of Technology



**Model Schedule for Diesel Technology**

| | |
|---|---|
| **Semester 1** | |
| DETC 105: Diesel Shop Safety | 1 |
| DETC 110: Diesel Service Fundamentals | 3 |
| DETC 115: Diesel Engine, Electrical, and Drive Train Components and Systems Preventive Maintenance* | 3 |
| DETC 120: Diesel Vehicle Brake, Suspension & Steering, and Cab Components Systems Preventive Maintenance* | 2 |
| DETC 160: Basic Electricity* | 3 |
| CIS 111: Intro to Computers | 3 |
| MATH 126: Technical Math I**^ | 3 |
| **Semester 2** | |
| DETC 125: Diesel Fuel and Supply Systems* | 3 |
| DETC 150: Diesel Engine Technology* | 4 |
| DETC 155: Diesel Engine Lab* | 3 |
| DETC 165: Introduction to Hydraulics* | 3 |
| MATH 132: Elementary Geometry* or Math 136 Technical Math II* | 3 |
| ENG 106: English Composition | 3 |
| **Semester 3** | |
| DETC 205: Diesel Engine Electronic Fuel Systems, Operation and Diagnostics* | 3 |
| DETC 210: Vehicle Electronic Operation, Diagnostics, and Troubleshooting* | 3 |
| DETC 215: Medium and Heavy-Duty Brake Systems* | 4 |
| DETC 220: Diesel Equipment HVAC* | 3 |
| ENG 216: Technical Report Writing* or ENG 221 Public Speaking* | 3 |
| PHYS 106: Physics for Everyday Life | 3 |
| **Semester 4** | |
| DETC 250: Manual, Automatic/Autoshift Transmission* | 4 |
| DETC 255: Steering, Suspension, Alignment* | 3 |
| DETC 260: Basic Welding and Fabrication* | 3 |
| DETC 265: Diesel Equipment Drive Train* | 3 |
| General Studies Elective | 3 |
| Humanities Elective | 3 |
| **Additional General Education Requirements** | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **76** |

** Prerequisite or Co-requisite Required. See Course Description.*

***Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 132/MATH 136, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

*^ Minimum Grade Required. See Course Description.*

# Diesel Technology (DETC)

### DETC 105 (1 credit) Diesel Shop Safety

Diesel Shop Safety presents an overview of safety in the Diesel Industry, including an introduction to OSHA requirements. Safety in the Diesel Shop is stressed. Instructor demonstrations and student hands on training in common shop safety practices, i.e., PPE, Fire Protection and Egress, Flammable and Combustible Liquids, Machine Guarding, Electrical Safety, Lock Out/Tag Out, and Fall Prevention is thoroughly covered. Students will also complete the SP-2 online safety training course.

### DETC 110 (3 credits) Diesel Service Fundamentals

Diesel service fundamentals presents an overview of the Diesel Industry, including an introduction to the Diesel Vehicle and its systems. Jobs in the Diesel Service field are covered. Safety in the Diesel Shop, including the proper use of hand and power tools is demonstrated. Instructor demonstrations and student hands on training in common shop practices, i.e., proper vehicle lifting and jacking procedures, thread cutting and repair, fasteners, torque, and torque to yield is thoroughly covered. Measurement systems, including USC and metric are discussed. Students will receive hands on training using most of the common diesel precision measurement tools including micrometers, dial indicators, bore gauges, and torque wrenches. Students will also receive training on common tools and equipment found in a modern diesel shop. This includes: grinders, drill press, hydraulic press, and many more shop tools and equipment.

### DETC 115 (3 credits) Diesel Engine, Electrical, and Drive Train Components and Systems Preventive Maintenance

Diesel Engine, Electrical, and Drive Train Components and System Preventive Maintenance presents an overview of the Diesel Systems and how they are inspected and maintained. Industry procedures on maintaining the Diesel Vehicle is discussed and demonstrated. Instructor demonstrations and student hands on training in common shop practices, i.e., Diesel Engine Maintenance and Inspection, Drive Train Maintenance and Inspection, and Electrical/Electronic System Maintenance and Inspection. The tasks included in this Course are entry level Technician skills and designed to introduce the student to correct procedures and practices of vehicle maintenance and inspection in a teaching/ learning environment.

*Prerequisite: DETC 105, DETC 110*

### DETC 120 (2 credits) Diesel Vehicle Brake, Suspension, Steering, & Cab Components Systems Preventive Maintenance

Diesel Vehicle Brake, Steering & Suspension, and Cab Components and System Preventive Maintenance presents an overview of the Diesel Vehicle Systems and how they are Maintained. Industry procedures on maintaining the Diesel Vehicle is discussed and demonstrated. Instructor demonstrations and student hands on training in common shop practices, i.e., Diesel Vehicle Air and Hydraulic Brakes Maintenance and Inspection, Steering &Suspension System Maintenance and Inspection, and Cab Maintenance and Inspection. The tasks included in in this Course are entry level Technician skills and designed to introduce the student to correct procedures and practices of vehicle inspection in a teaching/learning environment.

### DETC 125 (3 credits) Diesel Fuel and Supply Systems

Diesel Fuel and Supply Systems presents an overview of the Diesel Fuel Delivery Systems. Instruction starts at the supply tank and includes lines, filters, transfer pumps, and injector types and includes Instructor demonstrations and student hands on training in the most common fuel system preventative maintenance, diagnosis, and repairs. Students will also receive training in Shop practices, i.e., inspect fuel tanks and lines, low pressure fuel system components, and high-pressure system components. Students will receive hands on training using most of the common diesel fuel system diagnostic tools including electronic diagnostic equipment.

*Prerequisite: DETC 105, 110*

### DETC 150 (4 credits) Diesel Engine Technology

Diesel Engine Technology presents an overview of the Diesel Engine, Diesel Engine components, Diesel Engine Systems and Operation. Industry procedures dealing with the Diesel Engine are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Diesel Engine Cylinder Head and Valve Train, Engine Block, Lubrication System, Cooling System, Air Induction and Exhaust Systems, and Engine Brakes. The tasks included in this Course are designed to give the student a thorough understanding of the Diesel Engine, Diesel Engine Systems, and Diesel Engine Components.

*Prerequisite: DETC 115*

### DETC 155 (3 credits) Diesel Engine Lab

Diesel Engine Technology Lab provides hands on training and skill acquisition from the Diesel Engine Course. The Diesel Engine Lab presents an overview of the Diesel Engine, Diesel Engine components, Diesel Engine Systems and Operation. Industry procedures dealing with the Diesel Engines are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Diesel Engine Cylinder Head and Valve Train, Engine Block, Lubrication System, Cooling System, Air Induction and Exhaust Systems, and Engine Brakes. Each student will disassemble, measure components, diagnose wear and/or failure, and reassemble a Diesel Engine. The tasks included in this course are designed to give the student a thorough understanding of the Diesel Engine, Diesel Engine Systems, and Diesel Engine Components.

*Prerequisite: DETC 115*

### DETC 160 (3 credits) Basic Electricity

Diesel Basic Electricity Course is an overview of the Diesel Electrical System, Battery System, Starting System, Charging System, Lighting System, and Cab & Chassis Electrical System. Industry procedures dealing with the Electrical Systems are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Basic Electrical Theory, 12- & 24-Volt Battery Systems, Engine Starting Systems, Unit Charging Systems, Vehicle Lighting Systems, and Vehicle Cab & Chassis Electrical Systems. The tasks included in this Course are designed to give the student a thorough understanding of Basic Electrical Principles and specific skills as related to a Diesel Vehicle.

# DETC 165 (3 credits) Introduction to Hydraulics

Introduction to Hydraulics Course is an overview of Hydraulic Systems used in Diesel Powered Equipment. Hydraulic power is used to assist the operator to perform tasks otherwise impossible to complete. Fluid power is used to move and lift heavy objects. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Basic Hydraulic Theory, Hydraulic pumps, Filtration/Reservoirs, Hoses, Fittings & Connections, Control Valves, and Actuators. The tasks included in this Course are designed to give the student a thorough understanding of Basic Hydraulic Principles and specific skills as related to Diesel Powered Equipment.
*Prerequisite: DETC 105 &110*

# DETC 205 (3 credits) Diesel Engine Electronic Fuel Systems, Operation and Diagnostics

Diesel Engine Electronic Fuel Systems, Operation, and Diagnostics presents an overview of the Diesel Engine Electronic Fuel Systems. It covers the use of electronic equipment for troubleshooting, diagnosing, and repairing modern computerized fuel systems. Industry procedures dealing with Electronic Fuel Systems are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Identify Electronic Fuel System components and configuration, perform system performance tests, and repair and service the Electronic Fuel System. The tasks included in this Course are designed to give the student a thorough understanding of the Diesel Engine Electronic Fuel System.
*Prerequisite: DETC 160*

# DETC 210 (3 credits) Vehicle Electronic Operation, Diagnostics, and Troubleshooting

Vehicle Electronic Operation, Diagnostics, and Troubleshooting presents an overview of the Vehicle Electronic Systems. It covers the use of electronic equipment for troubleshooting, diagnosing, and repairing modern vehicle systems. Industry procedures dealing with Vehicle Electronic Systems are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Identify Vehicle Electronic System components and configuration, perform system performance tests, and repair and service the Vehicle Electronic Systems. These systems include: body controllers, Diagnostic software, multiplexing, and exhaust treatment systems. The tasks included in this Course are designed to give the student a thorough understanding of the Diesel Vehicle Electronic Systems.
*Prerequisite: DETC 160*

## DETC 215 (4 credits) Medium and Heavy-Duty Brake Systems

Medium and Heavy-Duty Brake Systems presents an overview of the Vehicle Braking Systems. It covers both hydraulic and air brake systems. Modern vehicle brake systems, both hydraulic and air, are studied. The course includes standard repair and service procedures for; hydraulic systems, hydraulic system foundation components, air system, air system foundation components, drum and disc brake systems, power assist and parking brake systems. Troubleshooting ABS (antilock braking system), traction control, and vehicle stability are also covered.
*Prerequisite: DETC 120*

## DETC 220 (3 credits) Diesel Equipment HVAC

Diesel Equipment HVAC presents an overview of the Diesel Equipment Heating, Ventilation, and Air Conditioning System and Operation. Industry procedures dealing with the HVAC System are discussed and demonstrated. This course includes Instructor demonstrations and student hands on training in common shop practices, i.e., Identify HVAC system components and configuration, identify refrigerant types, Perform system performance tests, and repair and service HVAC system controls. The tasks included in this Course are designed to give the student a thorough understanding of the Diesel Equipment HVAC System, and controls.
*Prerequisite: DETC 120*

## DETC 250 (4 credits) Manual, Automatic/Autoshift Transmission

The Manual, Automatic/Autoshift Transmission Course presents an overview of transmissions used in modern Medium and Heavy- Duty Trucks. It covers both maintenance and repair of these transmissions. The course includes standard repair and service procedures for; manual transmissions, automatic transmissions, and autoshift transmissions. Troubleshooting noise complaints and shifting problems, including electronic and air shift are also covered.
*Prerequisite: DETC 115*

## DETC 255 (3 credits) Steering, Suspension, Alignment

The Steering, Suspension, and Alignment Course presents an overview of how these systems are used in modern Medium and Heavy-Duty Trucks. It covers both maintenance and repair of these systems. The course includes standard repair and service procedures for; manual and power steering systems, air and spring suspension systems, and checking and adjusting vehicle alignment. Troubleshooting steering, suspension, and handling complaints and repairing these system problems are also covered. *Prerequisite: DETC 120*

## DETC 260 (3 credits) Basic Welding and Fabrication

The Basic Welding and Fabrication Course presents an overview of how these skills are used in the modern Medium and Heavy- Duty Truck Shop. The course includes basic blueprint reading, Oxy-fuel heating, cutting, and welding. It also provides training in Plasma Arc Cutting, Stick, and MIG Welding. These entry level skills are utilized in truck repair shops, trailer repair and fabrication facilities, and agriculture/heavy equipment repair shops.
*Prerequisite: DETC 115*

## DETC 265 (3 credits) Diesel Equipment Drive Train

The Diesel Equipment Drivetrain Course presents an overview of how these systems are used in modern Medium and Heavy-Duty Trucks. It covers both maintenance and repair of these systems. The course includes standard repair and service procedures for; clutch, driveshaft and universal joints, drive axles, wheel bearings, and tires and wheels. Troubleshooting and repairing these systems is a key skill needed for today's technician.
*Prerequisite: DETC 105 &110*

# Electrical Technology

## What is Electrical Technology?

Electrical Technology provides the opportunity to acquire the theory and skills needed to gain entry-level employment and advancement at an accelerated pace in the electrical field. Students will be able to apply basic electrical theory to all aspects of electrical technology. Skills and safe working habits are developed through construction and maintenance work project assignments. Since electricity has become an integral part of everyday life, an adequate supply of electrical power is necessary, as well as a reliable system for efficient utilization; thus, there is a continuing need for qualified electrical technicians.

Graduates' knowledge and skills are useful in such career areas as electrical engineering technicians, power plant technicians, electrical construction, industrial maintenance, and as technical representatives. High school prerequisites for this program are Algebra I & II, and a GPA of at least 2.5.

## A Graduate of this Program will be able to:

- Demonstrate technical skills in a variety of electrical fields, apply these skills to new developments in these fields, and apply accepted safety standards.
- Demonstrate the ability to design, develop, and analyze electrical circuits and systems.
- Complete parts lists and order forms that demonstrate knowledge of catalogs and of coding and numbering systems for devices, hardware, and materials.
- Interpret and develop blueprints, schematic diagrams, and wiring plans and transform them into functioning projects that conform to the National Electrical Code and/ or other specifications.
- Evaluate electrical circuits and systems and communicate the results of such evaluations verbally or in writing.
- Demonstrate basic knowledge of construction procedures and electrical wiring techniques.
- Demonstrate knowledge of the use of test equipment and the electrical theory used in troubleshooting, repair, and operation of circuits, systems, and equipment.
- Demonstrate knowledge of the theory and mechanics of rotating machinery, programmable controllers, transformers, and instrumentation.
- Demonstrate leadership skills.

**Keith A. Brubaker, Instructor**
BA: Western Governors University
AAS: Thaddeus Stevens College of Technology
Journeyman Electrician Electrical Apprenticeship Program: Associated Builders and Contractors, Inc., Keystone Chapter

**Frederick F. Bube, Instructor**
BS: The Pennsylvania State University Occupational Safety and Health Administration (OSHA) General Industry Certification Trainer

**Andrew Jacobs, Instructor**
MEd: Temple University
BS: The Pennsylvania State University
Electrical Apprenticeship Program: IBEW, Local 98 Philadelphia
Secondary School Counselor: Immaculata University
Occupational Safety and Health Administration (OSHA) 10 Trainer, WVUVU
NABCEP Entry Level Solar PV Installer Certification Program Instructor

**Brian J. Kochan, Instructor**
MA: University of Maine
BS: Millersville University
AAS: Thaddeus Stevens College of Technology

**Model Schedule for Electrical Technology**

| | |
|---|---|
| **Semester 1** | |
| ELEC 107: Electricity I: Theory and Analysis Lab | 1 |
| ELEC 113: Electricity I: Theory and Analysis | 4 |
| ELEC 117: Electricity I: Practicum | 4 |
| ELEC 120: Electricity I: Systems Design | 3 |
| MATH 137: Intermediate Algebra (or higher) †^ | 3 |
| ENG 106: English Composition | 3 |
| **Semester 2** | |
| ELEC 126: Electricity II: Systems Design* | 3 |
| ELEC 157: Electricity II: Theory and Analysis Lab* | 1 |
| ELEC 162: Electricity II: Theory and Analysis* | 4 |
| ELEC 168: Electricity II: Practicum* | 4 |
| ENG 216: Technical Writing* | 3 |
| MATH 141: Trigonometry (or higher) *^ | 3 |
| **Semester 3** | |
| ELEC 211: Industrial Electronics* | 4 |
| ELEC 216: D.C. & A.C. Motors and Generators* | 4 |
| ELEC 257: Industrial Motor Control* | 4 |
| PHYS 213: General Physics I* | 4 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 4** | |
| ELEC 206: Industrial Electricity* | 4 |
| ELEC 263: Advanced Industrial Motor & Drive Control* | 4 |
| ELEC 267: Programmable Logic Controllers* | 4 |
| Humanities Elective | 3 |
| General Studies Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **74** |

*** Prerequisite or Co-requisite Required. See Course Description.**

**†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.**

**^ Minimum Grade Required. See Course Description.**

## Electrical Technology (ELEC)

# ELEC 107 (1 credits) Electricity I: Theory and Analysis Lab

Laboratory assignments enable students to demonstrate the theoretical topics covered in ELEC 113. Lab sessions train students to properly connect electrical circuitry and to utilize appropriate metering instruments to take specific measurements to determine voltage, resistance, current, and power, and to troubleshoot various circuit layouts.
*Co-requisite: ELEC 113*

# ELEC 113 (4 credits) Electricity I: Theory and Analysis

This course presents principles, laws, and formulas relating to basic direct current (DC) and alternating current (AC) applications in electricity. Topics include electron theory, magnetism, DC power supplies, Ohm's Law, Kirchhoff's Laws, AC waveform analysis and basic motor design. Resistive and inductive loads and various electrical circuit layouts are analyzed.
*Co-requisite: ELEC 107*

### ELEC 117 (4 credits) Electricity I: Practicum

Workshop projects enable students to develop an understanding of fundamental residential and preliminary commercial circuit design and installation in accordance with the National Electric Code (NEC) and associated building regulations.
*Co-requisite: ELEC 120*

# ELEC 120 (3 credits) Electricity I: Systems Design

This course is an introduction to fundamental residential and preliminary commercial wiring systems design. Topics include Occupational Safety and Health Administration (OSHA) certification; electrical and on-the-job safety; tool and material familiarization; plan design and specifications; wire diagramming; and the use of applicable National Electrical Code (NEC) standards.
*Co-requisite: ELEC 117*

# ELEC 126 (3 credits) Electricity II: Systems Design

This course is an advanced study in commercial and industrial electrical systems design and installation. Sizing various raceway systems for commercial and industrial applications, custom electrical enclosure sizing, and poly-phase distribution systems are reviewed in detail. Industrial process and motor control material, circuit planning and design, and AC motors sizing and wiring methods introduce students to advanced electrical control systems.
*Prerequisites: ELEC 117 and ELEC 120*
***Co-requisite: ELEC 157 and ELEC 168***

# ELEC 157 (1 credit) Electricity II: Theory and Analysis Lab

Laboratory assignments enable students to analyze AC waveforms and AC circuit characteristics by connecting the appropriate electrical components and utilizing electrical measuring instruments to take specific measurements. Computer software is used to enable advanced circuit analysis and troubleshooting.
*Prerequisites: ELEC 107 and ELEC 113*
*Co-requisite: ELEC 162*

# ELEC 162 (4 credit) Electricity II: Theory and Analysis

This course presents advanced study in the principles, laws, and formulas relating to alternating current (AC) applications in electricity. Topics include AC waveform analysis, electromagnetism, power generation and distribution, vector diagrams, power factor and correction, single-phase and poly-phase systems, and motors.
*Prerequisites: ELEC 107 and ELEC 113*
*Co-requisite: ELEC 157*

# ELEC 168 (4 credit) Electricity II: Practicum

**This course is a hands-on approach to commercial and industrial electrical systems design and installation. Assignments include schematic and ladder diagramming, commercial wiring and raceway systems installations, process control wiring, troubleshooting single-phase and poly-phase distribution systems, motors, and motor control circuits.**
*Prerequisites: ELEC 117 and ELEC 120*
*Co-requisite: ELEC 126*

# ELEC 206 (4 credits) Industrial Electricity

This course presents principles and industry standards relating to industrial electrical power distribution systems. Students will learn about power distribution equipment including single- and three-phase transformers, power switchgear, switchboards, panelboards, and motor control centers. Student learning is centered on the design and installation of industrial power equipment based on the standards established by the National Electrical Code.
*Prerequisites: ELEC 126, ELEC 157 and ELEC 162*

# ELEC 211 (4 credits) Industrial Electronics

This course presents theory and practice in basic industrial

electronic components found in the electrical industry. Students will learn about digital and analog electronic devices including diodes, transistors, SCRs, Triacs and common Integrated Circuits. A laboratory component will provide students with the opportunity to observe the operational characteristics of electronic components and their use in common electrical control devices/circuits.
*Prerequisites: ELEC 126, ELEC 162, and ELEC 168*

## ELEC 216 (4 credits) DC and AC Motors and Generators

This course presents principles and industry standards relating to electric generators and motors. Students will learn about both DC and AC machines and their usage in power generation and industrial environments. Student learning is centered on the operation and performance of DC and AC generators and motors under varying load conditions. Additionally, students will lean installation and troubleshooting practices associated with electric motors. *Prerequisites: ELEC 126, ELEC 162, and ELEC 168*

## ELEC 257 (4 credits) Industrial Motor Control

This course presents principles and industry standards relating to the design and installation of basic industrial motor control circuits. Additionally, the theory and operational characteristics of electrical devices utilized in control circuits are covered. Topics include electrical drawings, contactors/ motor starters, basic motor control circuits (two-wire/three- wire/reversing), and control devices. A laboratory component provides students with the opportunity to design, to install, and to operate various motor control schemes/circuits.
*Prerequisites: ELEC 162 and ELEC 168*

## ELEC 263 (4 credits) Advanced Motor and Drive Controls

This course presents principles and industry standards relating to the design and installation of advanced industrial motor and drive control circuits. Additionally, the theory and operational characteristics of starting/stopping and motor speed control are covered. Topics include reduced voltage starting techniques, motor speed control, and AC/DC drive controls. A laboratory component provides students with the opportunity to design, to install, and to operate various motor control schemes/circuits, as well as opportunities to troubleshoot faulted circuits.
*Prerequisites: ELEC 216 and ELEC 257*

## ELEC 267 (4 credits) Programmable Logic Controllers

This course presents principles and industry standards relating to the use of PLCs used for the automation of industrial process controls. Additionally, students learn to utilize the proprietary programming software to interact with and program PLCs. Topics include PLC hardware characteristics, Boolean logic, number systems, relay-type, timing, counter and advanced PLC instructions. A laboratory component provides students with the opportunity to design, to install, and to operate various PLC-controlled processes in a simulated and hands-on environment.
*Prerequisites: ELEC 211 and ELEC 257*

# Electro- Mechanical Technology

## What is Electro-Mechanical Technology?

The Electro-Mechanical Technology Associate Degree program prepares students to work at the intersection of mechanical systems, electronics, and automation. Through hands-on training, students develop skills in troubleshooting, system integration, and equipment maintenance using tools such as PLCs, sensors, motors, hydraulics, pneumatics, and robots. The program emphasizes practical application across areas like circuit analysis, industrial wiring, mechanical drives, fluid power, process control, and automation. Graduates are equipped to interpret technical drawings, program automated systems, and maintain efficient manufacturing operations—making this an ideal path for careers in industrial maintenance, automation, and advanced manufacturing.

## A Graduate of this Program will be able to:

- Disassemble machinery or equipment to remove parts and make repairs.
- Repair or replace broken or malfunctioning components of machinery or equipment.
- Repair or maintain the operating condition of industrial production or processing machinery or equipment.
- Examine parts for defects, such as breakage or excessive wear.
- Reassemble equipment after completion of inspections, testing, or repairs.
- Observe and test the operation of machinery or equipment to verify the adequacy of repairs.
- Clean, lubricate, or adjust parts, equipment, or machinery.
- Analyze test results, machine error messages, or information obtained from operators to diagnose equipment problems.
- Record repairs and maintenance performed

**Andrew Friedlund**
MS: Montana State University
BS: Albright College

**Benjamin Harmuth, Instructor**
MEd: Temple University
BS: The Pennsylvania State University
AAS: Thaddeus Stevens College of Technology

**Caleb Lower, Instructor**
B.S: Eastern Mennonite University
AAS: Thadeus Stevens College of Technology

**David Thompson, Instructor**
BS: The Pennsylvania State University
AAS: Thaddeus Stevens College of Technology

**Model Schedule for**
**Electro-Mechanical Technology**

| | |
|---|---|
| **Semester 1** | |
| ELME 104: Mechanical Systems I | 4 |
| ELME 105: Manufacturing Fundamentals | 4 |
| ELME 107: Electrical Systems I | 4 |
| MATH 137: Intermediate Algebra†^ OR MATH 207: Pre-Calculus†^ (4 credits) | 3 |
| ENG 106: English Composition | 3 |
| **Semester 2** | |
| ELME 109: Programmable Logic Controllers I | 4 |
| ELME 116: Mechanical Systems II* | 4 |
| ELME 117: Electrical Systems II* | 4 |
| ENG 216: Technical Writing* | 3 |
| MATH 141: Trigonometry (or higher)*^ | 3 |
| **Semester 3** | |
| ELME 204: Mechanical Systems III* | 4 |
| ELME 208: Programmable Logic Controllers II* | 4 |
| ELME 215: Robotics and Motion Control | 4 |
| PHYS 213: General Physics I* | 4 |
| Humanities Elective | 3 |
| **Semester 4** | |
| ELME 214: Mechatronics Seminar & Advanced Project | 4 |
| ELME 218: Process Control & Industrial Instrumentation | 4 |
| ELME 225: Computer Integrated Manufacturing Systems & PLC's III* | 4 |
| General Studies Elective | 3 |
| General Studies Elective | 3 |
| **TOTAL CREDITS** | **73** |

***Prerequisite or Co-requisite Required. See Course Description***

***†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.***

***^ Minimum Grade Required. See Course Description.***

# Electro-Mechanical Technology (Mechatronics) (ELME)

### ELME 104 (4 credits) Mechanical Systems I
This course introduces the principles and applications of the most commonly found mechanical drive and fluid power components in an industrial manufacturing environment. Topics include mechanical power transmission devices, hydraulics, and pneumatics through a fundamental level along with related construction and troubleshooting techniques. All course material is supplemented with practical, hands-on exposure to the items described.

### ELME 105 (4 credits) Manufacturing Fundamentals
This course provides students with an overview of the various types of manufacturing that take place in the discrete, hybrid, and continuous sectors and of the jobs that must be performed within manufacturing. The course provides an introduction to the techniques and resources that manufacturers employ to improve operations, preparing students for independent investigating and life-long learning. It provides basic knowledge and skills with regard to print/ schematic reading, CAD drawing, measurement, and quality assurance. At least one plant tour is included as part of this course to provide firsthand validation of the topics covered.

### ELME 107 (4 credits) Electrical Systems I
This course covers the principles and application of alternating current (AC) and direct current (DC) electricity, industrial sequential control, and electrical controls construction as found in a typical manufacturing environment. Topics include AC and DC circuit analysis and measurement in resistive, capacitive, and inductive circuits; AC fixed-speed motor control; control transformers, relays, timers, and counters; mechanical, pneumatic, and hydraulic input and output devices; sequencing and logic functions; introduction to component and systems troubleshooting; electrical wiring practices; conduit and raceways; and requirements for conductors, disconnects, and raceways as specified by the National Electric Code (NEC). All course material is supplemented with practical hands-on exposure to the items described.

### ELME 109 (4 credits) Programmable Logic Controllers I
This course covers the principles and application of programmable logic controllers (PLCs) as found in a typical manufacturing environment. Topics include understanding the physical components that make up a PLC, basic PLC programming, and understanding the components that make up input/output, including AC/DC discrete input modules and analog input and output modules; how these modules connect to the PLC and to output devices such as motor controls, variable frequency drives, valves, and other types of machine controls.

### ELME 116 (4 credits) Mechanical Systems II
This course covers the principles and applications of the most commonly found mechanical drive and fluid power components in an industrial manufacturing environment. Topics include mechanical power transmission devices and pneumatics and hydraulics through an intermediate level along with related construction and troubleshooting techniques. All course material is supplemented with practical, hands-on exposure to the items described.
*Prerequisites: ELME 104*

### ELME 117 (4 credits) Electrical Systems II
This course covers the principles, application, troubleshooting, and maintenance of rotating electrical motors and electronic motor drives as used in industry. Topics include various types of single- and three-phase motors, various types of DC motors, reduced voltage starting, braking, DC electronic drives and AC variable frequency drives. The course builds upon the principles and applications covered in ELME 107.
*Prerequisites: ELME 107*

### ELME 204 (4 credits) Mechanical Systems III
This course covers the principles and applications of the most commonly found mechanical drive and fluid power components in an industrial manufacturing environment. Topics include mechanical power transmission devices, pneumatics, and hydraulics through at an advanced level along with related construction and troubleshooting techniques. All course material is supplemented with practical hands-on exposure to the items described.
*Prerequisites: ELME 104 and ELME 116*

### ELME 208 (4 credits) Programmable Logic Controllers II
This course covers the principles and application of programmable logic controllers (PLCs) featuring the IEC 61131-3 programming standard. Topics include how to install PLCs; how to configure modules; how to wire input and output modules, including temperature-sensing devices (thermocouples and resistive temperature detectors) and analog devices featuring 0–10 volts and 4–20 mA standards. The course also includes programming the built-in human-machine interface (HMI) which allows program control and status update through a built-in touch screen.
*Prerequisites: ELME 109*

## ELME 214 (4 credits) Mechatronics Seminar and Advanced Project

This course provides a capstone experience for the associate of applied science degree in Electro-Mechanical Technology by requiring that students—with a teammate(s)—apply skills and knowledge from each of the program areas to an independent mechatronics project. Students develop and implement a project plan and budget approved by the instructor that demonstrates the ability to integrate the skills and knowledge obtained over the previous three semesters of study. Students work with actual industrial equipment and machinery in a realistic application. This course broadens students' knowledge with respect to technology suppliers, equipment, and applications. Students should begin planning for this course during the semester prior to the semester in which the course is completed.

## ELME 215 (4 credits) Robotics and Motion Control

This course provides students with a background in the programming and application of industrial robots and general purpose synchronized multi-axis motion control. Expanding upon previously-learned concepts, this course examines the combination of multiple axes of motion to perform useful functions such as creating a flexible manufacturing system utilizing robots and broadens the knowledge of different programming languages to initiate and control motion sequences. Students learn how to implement electronically many of the simple machines introduced in previous courses such as gear drives, belt drives, line shafts, and cams.

## ELME 218 (4 credits) Process Control and Industrial Instrumentation

This course covers the fundamentals of process control and instrumentation as applied in industry for the control of level, flow, temperature, and pressure. The concept of a control loop is introduced and each of the loop's components— sensor, controller, and final element—are examined. Design, documentation, operation, performance tuning, and troubleshooting of single-loop systems is discussed.

### ELME 225 (4 credits) Computer-Integrated Manufacturing Systems and PLCs III

This course guides students through the processes of interfacing and integrating manufacturing components and unit operations into useful systems. Students work with touch screen displays (HMI) networked to programmable logic controllers. System integration is accomplished using digital input/output, DeviceNet, and TCP/IP Ethernet networking. The course involves working with a flexible manufacturing lab that includes a bar code reader, vision system, servo, and AC drive to manipulate a conveyor and other equipment

# Electronic Engineering Technology

## What is Electronic Engineering Technology?

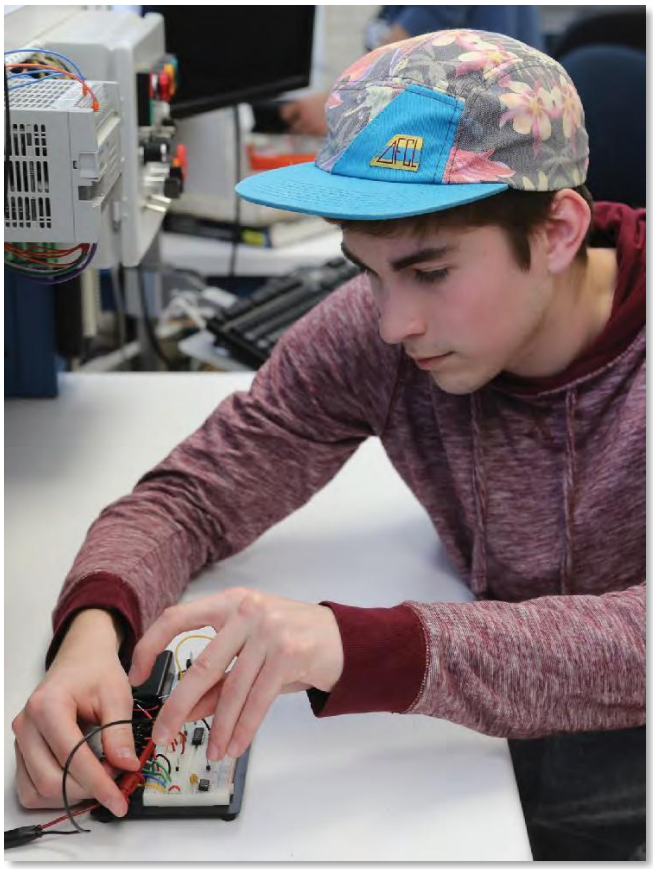
Electronic Engineering Technology provides the opportunity to acquire the skills needed to gain employment as an engineering technician in manufacturing and industry. Skills are developed by theoretical analysis and by the use of manipulative practice in the laboratory. The program gives students a broad theoretical and practical background in analog and digital electronic circuits. Graduates of the Electronic Engineering Technology program are prepared to find employment as technicians with the ability to prototype, to test, to program, to integrate, to install, to maintain, and to repair electronic systems. Because of the use of electronics in most industries, many employment opportunities in varied environments exist. High school prerequisites for this program are Algebra I and II, and a GPA of at least 2.5.

## A Graduate of this Program will be able to:

- Demonstrate a working knowledge of DC and AC components and circuits.
- Demonstrate a basic knowledge of solid state devices and circuits.
- Analyze, design, construct, and integrate components and circuits of various types.
- Demonstrate a basic knowledge of digital electronics, logic circuits, microprocessors, and programmable logic controls (PLCs).
- Solve math problems related to circuit analysis, digital electronics, and other systems.
- Operate standard test equipment to analyze electronic systems.
- Design and troubleshoot simple microprocessor-based systems and interface peripheral devices.
- Work with robotics and motion control systems at a basic level.
- Understand pneumatics at a basic level.
- Network PLCs and other data acquisition and control systems.
- Interface sensors and control elements to PLCs

**Thomas L. Evans, Instructor**
AAS: Thaddeus Stevens College of Technology

**Bruce C. Schreiner, Professor**
MEd: The Pennsylvania State University
BS: Millersville University
AAS: Thaddeus Stevens College of Technology



**Model Schedule for Electronic Engineering Technology**

**Semester 1**

| | |
|---|---|
| EET 108: DC Fundamentals (w/lab)* | 4 |
| EET 118: AC Fundamentals (w/lab)* | 4 |
| EET 128: Combinational Digital Logic (w/lab) | 4 |
| MATH 137: Intermediate Algebra†^ OR MATH 207: Pre-Calculus† * (4 credits) | 3 |
| ENG 106: English Composition | 3 |

**Semester 2**

| | |
|---|---|
| EET 158: Solid State Devices I (w/lab)* | 4 |
| EET 168: Solid State Devices II (w/lab)* | 4 |
| EET 178: Sequential Digital Logic (w/lab)* | 4 |
| ENG 216: Technical Writing* | 3 |
| MATH 141: Trigonometry (or higher)*^ | 3 |

**Semester 3**

| | |
|---|---|
| EET 217: Microprocessors/Microcontrollers (w/lab)* | 4 |
| EET 222: Interfacing & Programming Microprocessors (w/lab)* | 4 |
| EET 238: Interfacing and Basic Control Circuits (w/lab)* | 4 |
| PHYS 213: General Physics I* | 4 |
| Humanities Elective | 3 |

**Semester 4**

| | |
|---|---|
| EET 258: Automation & Control Systems with PLCs I (w/lab)* | 4 |
| EET 268: Automation & Control Systems with PLCs II (w/lab)* | 4 |
| EET 278: Data Acquisition and Control Project* | 4 |
| General Studies Elective | 3 |
| General Studies Elective | 3 |

| | |
|---|---|
| TOTAL CREDITS | 73 |

* Prerequisite or Co-requisite Required. See Course Description.
†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.

^ Minimum Grade Required. See Course Description.

# Electronic Engineering Technology (EET)

### EET 108 (4 credits) DC Fundamentals (w/Lab)
Voltage, current, resistance, conductance, power, and energy are defined. Ohm's law, Kirchoff's laws, Thevenin, Norton, and Superposition theorems are used to analyze resistive circuits. Components studied include resistors, potentiometers, bridge circuits, comparators, simple timing circuits, switches, circuit breakers, relays, h-bridges, solenoids, photo-resistors, thermistors, voltage sources, and current sources. Students build simple DC circuits based on concepts and components being studied. Electrical measurements are performed to verify proper circuit operation. Circuit construction and measurement techniques are taught. Students are trained in the use of digital multi- meters and DC power supplies as test equipment.
*Co-requisites: Math 137*

### EET 118 (4 credits) AC Fundamentals (w/Lab)
Waveforms, capacitors, inductors, and transformers are studied. Reactance, impedance, phase angles, and power factor are calculated. Pulse width modulation, time constants, and filters are introduced. Students build simple AC circuits based on concepts and components being studied. Wave parameters, capacitance, inductance, impedance, and phase angles are measured to verify proper circuit operation. Students are trained in the use of signal generators and oscilloscopes as test equipment.
*Prerequisite: EET 108*

### EET 128 (4 credits) Combinational Digital Logic (w/Lab)
Basic digital electronic concepts are covered including introduction to digital machines, number systems (binary and hexadecimal), binary arithmetic, digital signals and switching, Boolean algebra, logic gates (AND, OR, NAND, NOR, XOR, XNOR), logic gate specifications, and basic combinational logic circuits. Includes an introduction to and programming of programmable logic devices (PLDs). Circuits are built from schematics and test equipment (DVM, logic analyzer, digital signal generator, and circuit simulation software) is used to learn the operation of the circuits.

### EET 158 (4 credits) Solid State Devices I (w/Lab)
Diodes, rectifiers, power supplies, regulators BJT transistors, and transistor amplifiers are studied. Students build and test diode circuits, power supplies, transistor circuits, and amplifiers.
*Prerequisites: EET 108 and EET 118*

### EET 168 (4 credits) Solid State Devices II (w/Lab)
FET transistors, op amps, thyristors, opto-isolators, and solid state relays are studied. Drivers, buffers, interfacing, pre- amps, amplifiers, active filters, mixers, oscillators, and phase controllers are built and tested.
*Prerequisite: EET 158*

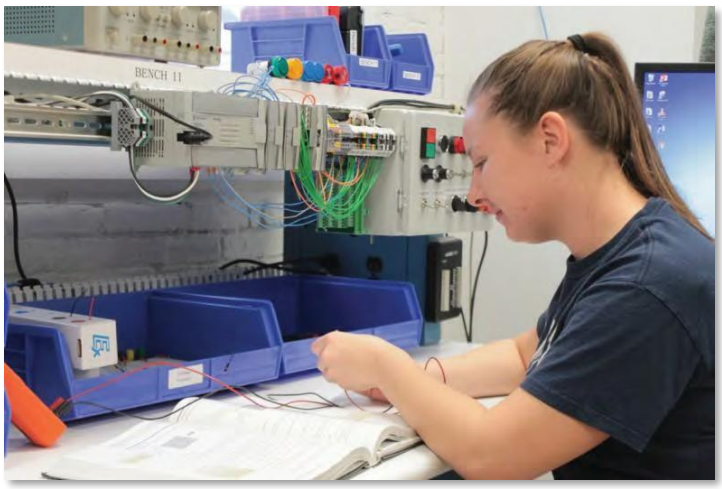
### EET 178 (4 credits) Sequential Digital Logic (w/Lab)
Comprehensive coverage of combinational and sequential logic circuits including adders, subtractors, flip-flops, shift registers, counters, digital multiplexors/de-multiplexors, and A/D and D/A conversions. Electronic equipment schematics are reviewed to develop technician-level skills. Circuits are built from schematics and test equipment (DVM, logic analyzer, digital signal generator, and circuit simulation software) is used to learn the operation of the circuits.
*Prerequisite: EET 128*

### EET 217 (4 credits) Microprocessors/Microcontrollers (w/Lab)
This course is an introduction to the basic architecture and instruction sets of microprocessors and microcontrollers. Learning activities include basic assembly language programming, working with programming IDE environment, software simulation tools, hardware emulation tools, and logic analysis of hardware signals. Both Harvard architecture and von Neumann architecture devices are covered.
*Prerequisites: EET 128 and EET 178*

### EET 222 (4 credits) Interfacing and Programming Microprocessors (w/ Lab)
This course involves the interfacing of basic input and output devices at the chip level to microprocessors and microcontrollers and also includes their support ICs and common peripheral devices. Learning activities include interfacing, programming (at assembly language level) and modifying existing assembly and C language code. Test equipment—including DSOs, DVMs, logic analyzers, and data analyzers—is used in support of these activities.
*Prerequisite: EET 217*

### EET 238 (4 credits) Interfacing and Basic Control Circuits (w/Lab)

This course will provide an introduction to common interfacing schemes and foundational control circuits. The student will gain insight into concepts involved in interfacing the outside world to and from a controller. The student will be introduced to basic circuits, ladder diagrams, and GUIs (graphic user interfaces) to create HMIs (human machine interfaces).
*Prerequisite: Successful completion of 1st year EET courses*




## EET 258 (4 credits) Automation and Control Systems with PLCs I (w/Lab)

This course handles electronic topics from an industrial viewpoint and deals with actual control systems utilizing programmable logic controllers (PLCs), IEC-61131 programming concepts, and industrial circuits. It also serves as introduction to process control, industrial process techniques, and instrumentation. During this course, the PLC is used as the control device where possible and therefore PLC knowledge is advanced in both interfacing and programming areas.
*Prerequisites: EET 108, EET 118, and EET 128*

## EET 268 (4 credits) Automation and Control Systems with PLCs II (w/Lab)

This course introduces mechanical, pneumatic, and photoelectric transducer devices used to convert all types of stimuli to electronic pulses and their use in industrial control circuits. Most activities use the PLC as the control element. Advanced ladder programming skills and higher-level language IEC-61131 programming is also covered. Industrial networking topics for control systems include RS232, TCP/IP, DH+, Modbus, DeviceNet, ASi, and other industrial networks. Motor and motion control topics include AC, DC, servo, and stepper motor operation. Motor and motion control systems are put into practical use and discussed as part of robotic systems.
*Co-requisites: EET 258*


### EET 278 (4 credits) Data Acquisition and Control Project

Students create a control system of their own design. The project incorporates topics from all semesters. Programming and interfacing are implemented with an automation emphasis. Aspects include design, construction, testing, and documentation.
Prerequisite: Successful completion of first three semesters of EET courses.
*Co-requisites: EET 258 and EET 268*

# Engineering CAD Technology

## What is Engineering CAD Technology?

The Engineering CAD Technology program prepares graduates for positions as entry-level CAD operators in a wide range of manufacturing and engineering industries. Skills acquired from this program of study will allow students to become an integral part of product design and the manufacturing of those products. Graduates will apply
specialized knowledge and skills utilizing state-of-the-art CAD software to think critically, to solve problems, and to effectively communicate with colleagues and supervisors in today's ever-changing work environment.

From preliminary drawings and sketches, to parametric design, to animated assemblies, graduates will learn how to simplify, enhance and streamline the manufacturing and engineering processes utilizing CAD. Students acquire comprehensive skills in the following technical areas: fundamentals of drafting, technical drawing, process pipe drafting, processes of manufacturing, geometric dimensioning and tolerancing (GD&T), metals fabrication drafting, and power transmission. Students' CAD skills are developed with a comprehensive exposure to the latest software releases of AutoCAD®, Autodesk Inventor®, SolidWorks®, and PTC CREO® (Pro/Engineer®).

## A Graduate of this Program will be able to:

- Produce working drawings such as detail, subassembly, and full-assembly drawings utilizing manual, freehand, and computer-aided drafting techniques.
- Recognize and apply the ASME Y14.5 guidelines in the creation of mechanical working drawings.
- Apply industrial standards to the creation of working drawings of sheet-metal components, welded assemblies, electronics drafting, piping systems, and power transmission components.
- Identify and understand basic manufacturing processes as they relate to the dimensioning of working drawings.
- Demonstrate an ability to work independently and to apply interpersonal and technical skills to solve problems as a member of a multi-disciplinary team.
- Demonstrate skills and proficiency in multiple 2D and 3D solid modeling CAD software packages.

Upon completion of the program, graduates will find various employment opportunities in the following fields:

- CAD operator
- Cost estimator
- Drafting manager
- Drafting supervisor
- Mechanical detailer
- Mechanical design technician

**Donald Hart, Assistant Professor**
AST: Thaddeus Stevens College of Technology
PCT Technical Committee, Sheet Metal
Society of Manufacturing Engineers (SME): Member
Technology Students Association (TSA):
State Conference Planning Team

**James Knapp, Professor**
MS: Millersville University
BS: Millersville University
American Design Drafting Association (ADDA): Member
Society of Manufacturing Engineers (SME): Member
International Technology and Engineering Education Association (ITEEA): Member Technology Students Association (TSA): State Event Coordinator
State Conference Planning Team
Epsilon Pi Tau (EPT) Honor Fraternity: Laureate Member


**Model Schedule for Engineering CAD Technology**

| | |
|---|---|
| **Semester 1** | |
| ECAD 105: Metallic Manufacturing Processes | 3 |
| ECAD 112: Technical Drawing* | 3 |
| ECAD 120: Intro to AutoCAD Applications* | 3 |
| ECAD 130: Advanced AutoCAD Applications* | 3 |
| MATH 137: Intermediate Algebra (or higher) †^ | 3 |
| CIS 211: Microsoft Excel | 3 |
| **Semester 2** | |
| ECAD 150: Intro to AutoDesk Inventor Applications* | 3 |
| ECAD 160: Advanced AutoDesk Inventor Applications* | 3 |
| ECAD 168: Process Pipe Drafting* | 3 |
| ECAD 171: Non-Metallic Manufacturing Processes* | 3 |
| ENG 106: English Composition | 3 |
| MATH 141: Trigonometry (or higher)* | 3 |
| **Semester 3** | |
| ECAD 207: Geometric Tolerancing* | 3 |
| ECAD 211: Metals Fabrication Drafting* | 3 |
| ECAD 220: Intro to Solid Works Applications* | 3 |
| ECAD 230: Advanced Solid Works Applications* | 3 |
| ENG 216: Technical Report Writing* | 3 |
| PHYSICS: Any Physics Elective | 3 |
| **Semester 4** | |
| ECAD 250: Introduction to Pro/Engineer Applications* | 3 |
| ECAD 260: Advanced Pro/Engineer Applications* | 3 |
| ECAD 266: Working Drawings* | 3 |
| ECAD 271: Power Transmission* | 3 |
| ENG 221: Public Speaking | 3 |
| Humanities: Elective | 3 |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **73** |

*** Prerequisite or Co-requisite Required. See Course Description.**
**†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.**

**^ Minimum Grade Required. See Course Description.**

# Engineering CAD Technology (ECAD)

### ECAD 105 (3 Credits) Fundamentals of Machining
This course will introduce students to common machine tools and processes. Students will be exposed to the various hand and power tools as well as the Vertical Mill and the Engine Lathe.

### ECAD 112 (3 Credits) Technical Drawing
A study of orthographic projection and drawing creation with applications in multi-view drawings including sectioning and auxiliary views. Techniques in pictorial drawing are also used to convey orthographic views as pictorial representations.
*Co-requisites: ECAD 105 and ECAD 120 or instructor approval*

### ECAD 120 (3 Credits) Introduction to AutoCAD® Applications
A practical application of 2D orthographic skills utilizing AutoCAD® integrating knowledge of software commands with drafting standards. Students also experience dimensioning styles, templates, and symbols libraries. During the course, students create a series of mechanical drawings.
*Co-requisites: ECAD 105 and ECAD 112 or instructor approval*

### ECAD 130 (3 Credits) Advanced AutoCAD®Applications
An advanced application of 2D orthographic skills utilizing AutoCAD® integrating knowledge of software commands with drafting standards. Students also experience advanced 2D commands, system variables, symbols libraries, attributes, customization, and macros. During the course, students create a series of mechanical working drawings packets.
*Prerequisite: ECAD 120 or instructor approval*

### ECAD 150 (3 Credits) Introduction to AutoDesk Inventor® Applications
An AutoCAD Inventor® applications course with an emphasis on solid modeling parts and basic assemblies and the transition from 3D solid models to 2D working drawings.
*Prerequisite: ECAD 130 or instructor approval*

### ECAD 160 (3 Credits) Advanced AutoDesk Inventor® Applications
An advanced AutoDesk Inventor® applications course with an emphasis on advanced modeling of parts, advanced assemblies, and working drawings and the generation of 2D working drawings from the solid models. Add-on packages such as pipe and tube, sheet metal, weldments, and wire harness diagrams are explored.
*Prerequisite: ECAD 150 or instructor approval*

### ECAD 168 (3 Credits) Process Pipe Drafting
An intermediate drafting course covering the topics appropriate for reading and creating the working drawings necessary to instruct in the assembly of piping and equipment for industrial processes. Students are also exposed to cable and harness drafting and the process in which drawings are created.
*Co-requisites: ECAD 150 and ECAD 160 or instructor approval*

### ECAD 171 (3 Credits) Processes of Manufacturing
An introduction to the processes commonly employed in the conversion of raw materials into finished products. This course provides students with a solid understanding of the operations necessary to cast, mold, form, separate, condition, assemble, and apply surface finishes to manufactured products.
*Prerequisite: ECAD 105*
*Co-requisite: ECAD 150 or instructor approval*

### ECAD 207 (3 Credits) Geometric Tolerancing
A study of the American Society of Mechanical Engineers (ASME) dimensioning guidelines including geometric dimensioning and tolerancing (GD&T). This course emphasizes the creation and usage of the drafting symbols necessary to define the form, fit, and function of mechanical components.
*Co-requisite: ECAD 211*

### ECAD 211 (3 Credits) Metals Fabrication Drafting
An intermediate drafting course covering the topics pertinent to reading and creating the working drawings necessary to instruct welders and metal fabricators in the creation of welded assemblies. This course includes a thorough review of industrial welding drafting practices and practical applications of the symbols required to specify them in an assembly.
*Prerequisite: ECAD 171*
*Co-requisite: ECAD 207 or instructor approval*

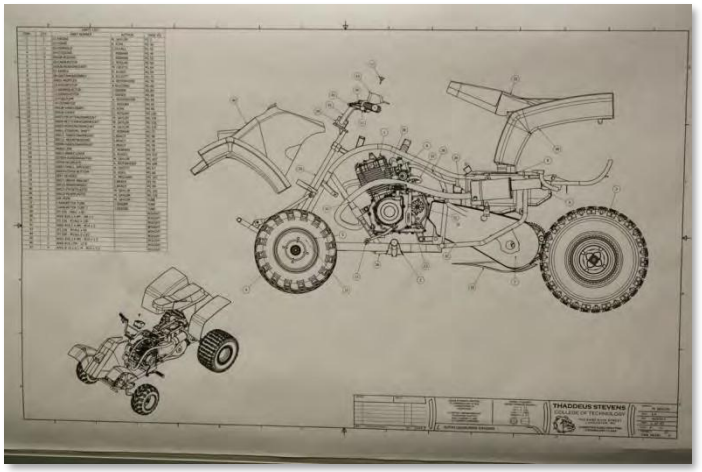
### ECAD 220 (3 Credits) Introduction to SolidWorks® Applications
Introduces students to the essential applications with an emphasis on how to use the SolidWorks® mechanical design software to build parametric models of parts and assemblies and how to make drawings of those parts and assemblies.
*Prerequisites: ECAD 112 and ECAD 160 or instructor approval*

## ECAD 230 (3 Credits) Advanced SolidWorks® Applications

Advanced SolidWorks® applications course focuses on developing skills central to the successful use of SolidWorks® parametric software. It is designed for SolidWorks users who have mastered the basics of parametric solid model design but who need to continue building skills for working with imported models, surface modeling, and an introduction to finite element analysis (FEA) using simulation software and model analysis.
*Prerequisite: ECAD 220 or instructor approval*

## ECAD 250 (3 Credits) Introduction to PTC CREO® Pro/Engineer®Applications

Introduces students to the essential applications that focuses on learning core-modeling skills in this comprehensive, hands-on course. Topics include sketching, part modeling, assemblies, drawings, and basic model management techniques. The course also includes a comprehensive design project that enables to practice new skills by creating realistic parts, assemblies, and drawings.
*Prerequisite: ECAD 230 or instructor approval*

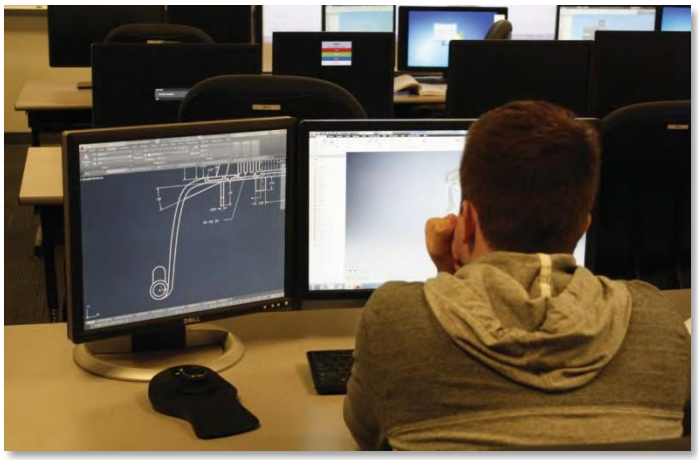


## ECAD 260 (3 Credits) Advanced Pro/Engineer® Applications

Focuses on developing skills central to the successful use of PTC CREO® Pro/Engineer®Applications parametric software. It is designed for PTC CREO® Pro/Engineer® users who have mastered the basics of parametric solid model design but who need to continue building skills for working with imported models, surface modeling, sheet metal models and mechanism design which permits users to animate their assemblies in a mechanical fashion. Other skills covered are simplified reps, top-down design, flexible components, shrink-wrap feature, skeleton models, layouts, and advanced drafting commands.
*Prerequisite: ECAD 250 or instructor approval*

## ECAD 266 (3 credits) Working Drawings

An advanced drafting course emphasizing the practices necessary to produce detail, sub-assembly, and full assembly mechanical drawings for industrial applications.
*Co-requisite: ECAD 271 or instructor approval*



## ECAD 271 (3 credits) Power Transmission

A study of power transmission fundamentals, the related computations, and drafting methodologies. Applications include drafting standards for utilizing bushings, keys, sheaves, belts, chains, clutches, and conveyor pulleys in working assembly drawings.
*Prerequisites: MATH 137 and MATH 141*
*Co-requisite: ECAD 266 or instructor approval*

# Graphic Communications & Printing Technology

## What is Graphic Communications and Printing Technology?

The Graphic Communications and Printing Technology program provides a comprehensive understanding of the printing process and related fields. The student receives training in all major areas, with preparation to enter one of several printing fields, depending on interest and ability.

Graduates with technical and mechanical interests find employment in desktop publishing, pre-press, presswork, and bindery operations. Skills in computer operations, electronics, photography, chemistry, and physics will also be useful in these areas.

Graduates with good English and math skills will find employment in proofreading, estimating, production planning, and sales. Those students with artistic talent may enter layout and design, advertising, or commercial art.

## A Graduate of this Program will be able to:

- Recognize the major printing processes and their products as well as the advantages of each process.
- Demonstrate the skills needed for entry-level positions (as advanced trainees) in the following areas: layout and design, copy preparation, desktop publishing, plate processing, direct-to-plate applications, press operations, and bindery operations.
- Assess personal strengths and limitations in various areas of the graphic arts.
- Demonstrate good work habits: Promptness to class, willingness to work, and the ability to accept supervision.
- Demonstrate knowledge of equipment and use appropriate safety precautions.
- Understand the various production departments and the contributions each makes to the finished product.
- Write clear, concise, legible, and accurate technical reports using standard grammatical English.
- Demonstrate skill in basic verbal communication.
- Solve basic math problems related to printing operations.

**Michael Brady, Assistant Professor**
BS: Walden University
AAS: Thaddeus Stevens College of Technology

**Megan Zettlemoyer, Instructor**
BFA: Fashion Institute of Technology

**Model Schedule for Graphic Communications & Printing Technology**

| | |
|---|---|
| **Semester 1** | |
| GRPH 116: Introduction to Desktop Publishing | 4 |
| GRPH 122: Digital Photography | 4 |
| GRPH 126: Printing Processes I | 4 |
| CIS 111: Intro to Computer Applications | 3 |
| MATH 111: Business Math (or higher) | 3 |
| **Semester 2** | |
| GRPH 150: Intro to Lithography* | 3 |
| GRPH 155: Intro to Screen Printing* | 3 |
| GRPH 160: Graphic Communications I | 3 |
| GRPH 165: Multimedia and Web Design | 3 |
| CIS 211: Microsoft Excel | 3 |
| ENG 106: English Composition | 3 |
| **Semester 3** | |
| GRPH 207: Bindery and Finishing | 3 |
| GRPH 214: Print Marketing | 3 |
| GRPH 222: Graphics Communications II* | 3 |
| GRPH 228: Printing Processes II* | 3 |
| Humanities Elective | 3 |
| ENG 221: Public Speaking OR | 3 |
| *ENG 216: Technical Writing | |
| **Semester 4** | 3 |
| GRPH 258: Advanced Lithography* | 3 |
| GRPH 262: Color Theory | 3 |
| GRPH 267: Graphics Communications Studio* | 3 |
| GRPH 272: Web Design* | 3 |
| Science Elective | |
| General Studies Elective | 3 |
| (May Not Take ARTS 106 Digital Photography) | |
| Additional General Education Requirements | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **73** |

*** Prerequisite or Co-requisite Required. See Course Description.**
**^ Minimum Grade Required. See Course Description.**

**Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 141, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.**

# Graphic Communications & Printing Technology (GRPH)

### GRPH 116 (4 credits) Introduction to Desktop Publishing
Introduction to the hardware and software used in desktop publishing. Topics include graphical user interface and current industry uses such as design, layout, typography, illustration, and imaging. Students receive hands-on training in the computer environment using current production software. Basic scanning techniques are demonstrated.

### GRPH 122 (4 Credits) Digital Photography
An introduction to the processes commonly employed in the conversion of raw materials into finished products. This course provides the student with a solid understanding of the operations necessary to cast, mold, form, separate, condition, assemble, and apply surface finishes to manufactured products.

### GRPH 126 (4 credits) Printing Processes I
Covers the various printing processes including offset, screen, flexo, and gravure. Career opportunities, salary potential, and the role each process plays in the industry today are also discussed. Safety procedures and operations are identified. Upon completion, students should be able to demonstrate an understanding of the major characteristics, advantages, and disadvantages of each process.

### GRPH 150 (3 credits) Introduction to Lithography
This course introduces students to the basic fundamentals of lithography. Through practical application, students develop a working knowledge of this printing process with a strong concentration into multi-color image reproduction and image registration.
*Prerequisite: GRPH 126*

### GRPH 155 (3 credits) Introduction to Screen Printing
This course introduces students to the basic fundamentals of screen printing. Through practical application, students develop a working knowledge of this printing process with a strong concentration into multi-color image reproduction and image registration.
*Prerequisite: GRPH 126*

### GRPH 160 (3 credits) Graphic Communications I
Covers the history, development, and commercial applications of printing processes. Students learn about the curriculum and the industry including its processes, products, and careers. Emphasis is placed on the attributes which are most desirable for successful entry and advancement.

### GRPH 165 (3 credits) Multimedia and Web Design
Introduces the fundamentals of design and production for presentations and the World Wide Web. Basics of hypertext markup language (HTML), the use of authoring software, and making portable data format (PDF) documents for internet downloads and multimedia basics are covered.

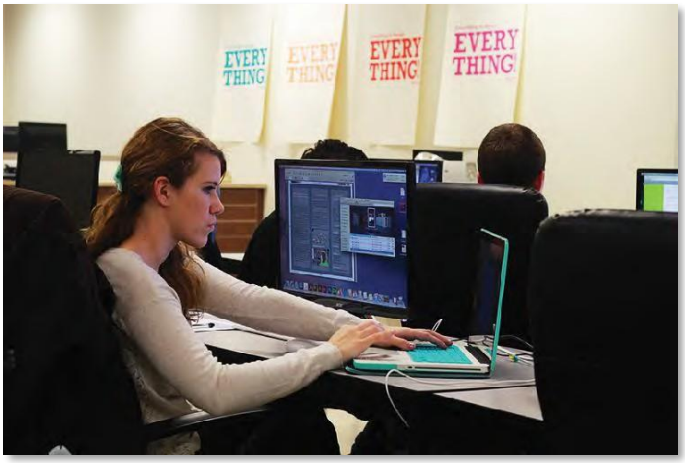
### GRPH 207 (3 Credits) Bindery and Finishing
Bindery and finishing is an increasingly important part of the printing process as it can provide unique physical characteristics to a finished product. Students develop an understanding of both the physical processes of bindery and finishing, along with understanding the creative application and added value these processes can provide to a final piece. Along with theory, students have the opportunity to operate folding equipment, produce die cuts, and create varnishes.

### GRPH 214 (3 Credits) Print Marketing
Commercial printers no longer simply provide a printed piece. They provide various solutions to communicating messages through different techniques along with the management of data. This course looks at how print is used to connect companies to consumers through trends in marketing.

### GRPH 222 (3 Credits) Graphic Communications II
This course provides an overview of the history of graphic communications, along with an in-depth analysis of what graphic communications is and how it reflects culture. Typography is a primary focus in this course. Students are challenged to develop creative solutions to problems using different techniques for developing ideas.
*Prerequisite: GRPH 160*

## GRPH 228 (3 Credits) Printing Processes II

In a continuation of GRPH 126, the major printing processes are discussed in greater detail, primarily offset printing. Students are introduced to multiple unit-offset press, press settings, and press troubleshooting. The aspects of paper and ink are discussed. An emphasis is placed on creating print ready files following industry specifications.
*Prerequisite: GRPH 126*

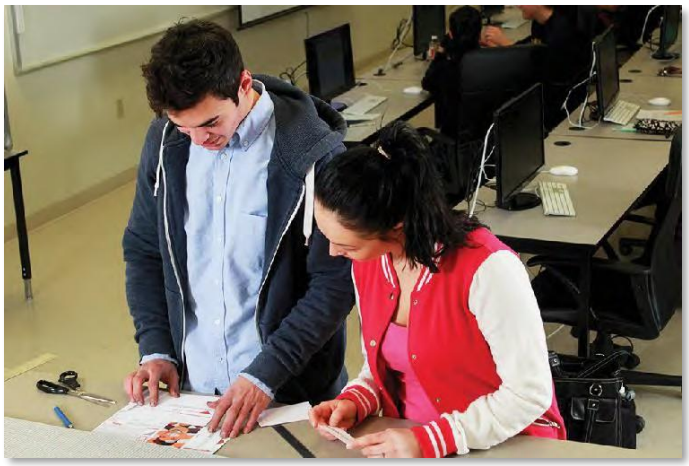



## GRPH 258 (3 Credits) Advanced Lithography

In this course, printing standards and quality control metrics for process color printing are examined. Students continue to expand their knowledge of the inner workings of an offset press using a press simulator program. The use of printing in marketing is also discussed.
*Prerequisite: GRPH 228*

## GRPH 262 (3 Credits) Color Theory

Color theory is the study of the science of color and light as it relates to the printing industry. Several color spaces are discussed, along with the usage for each. A focus is placed on managing color within the printing industry by means of devices, software, and techniques.



## GRPH 267 (3 Credits) Graphic Communications Studio

Communication skills are challenged to create unique solutions for a host of design problems. Emphasis is placed on the design process and working with others to craft a message. The course ends with a cumulative capstone project tasking students to design and produce several products. Students are also tasked with the creation of a portfolio.
*Prerequisite: GRPH 222*

## GRPH 272 (3 Credits) Web Design

The primary languages needed for web development, HTML and CSS, are introduced along with how to design for the web
*Prerequisite: GRPH 165*

# Heating, Ventilation, Air Conditioning, & Refrigeration

## What is HVACR?

The HVACR program is unique because it treats designing, retrofitting, testing, and balancing on a problem-solving level. This specialized program prepares the technician for the fast- growing, highly technical HVACR field.

The challenge for the service technician is to optimize the service operation of HVACR systems to maximize customer and employer satisfaction. Using computers to replicate various conditions that could be encountered, students develop a plan of action to use with live work.

Students learn current methods of identifying and performing efficiency evaluations on various types of heating, ventilation, and air-conditioning systems as well as adjusting and balancing equipment for maximum performance.

In addition to HVACR classroom theory sessions, students also perform service and installation on numerous live projects on and off campus. The HVACR laboratory includes tools, equipment, computers, and instrumentation typically found in commercial, residential, and industrial settings. The lab also includes ground source heat pumps, gas efficient furnaces, regular heat pumps, oil-fired furnaces, gas and oil boilers, ice machines, walk-in boxes, roof-top equipment, chiller systems, and commercial refrigeration trainers.

Challenging careers abound on a national level with firms offering graduates a variety of positions as service technicians, installation technicians, estimators, and in-plant industrial technicians. High school prerequisites for this program are Algebra I & II, and a GPA of at least 2.5.

## A Graduate of this Program will be able to:

- Demonstrate the ability to do technical work in a variety of heating, cooling, plumbing, and refrigeration fields; apply safety standards and understand and work with technical developments in the industry.
- Apply concepts of algebra and physics in the layout, design, development, and analysis of refrigeration and air conditioning equipment and systems.
- Identify and demonstrate correct use of tools, materials, and equipment used in the trade.
- Demonstrate the ability to read and interpret blueprints and use blueprints when installing equipment.
- Troubleshoot heating, cooling, and refrigeration equipment using standard troubleshooting procedures.
- Write clear, concise, legible, and accurate technical reports using technical English and apply verbal communication skills in job-related activities.
- Read and interpret electrical schematics and use schematics when installing and repairing equipment.
- Estimate the cost of an installation and design and lay out an effective system for a specific location and use.
- Demonstrate knowledge of the operation and use of hermetic, reciprocating, and centrifugal compressors.
- Apply basic knowledge of airflow, ventilation, and energy conservation concepts to the design of systems, using modern building design and solar energy technology.

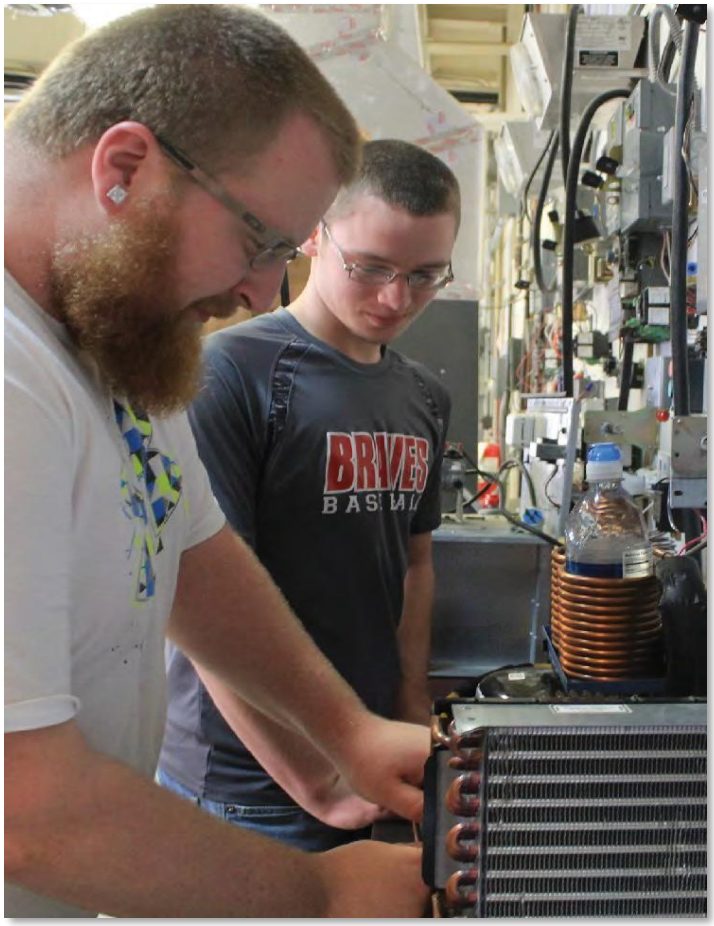
**Matthew Bixler, Instructor**
BS: Eastern Mennonite University
AAS: York Technical Institute

**Ty Christman, Instructor**
BS: Eastern Mennonite University
AAS: Washtenaw Community College

**Bart Heagy, Instructor**
BS: Eastern Mennonite University
CTE Certification: Temple University

**Bruce Hrycek, Instructor**
MBA: Trinity University
MD HVACR Master 01

**John Sweda, Instructor**
BS: Temple University
MEd: Bloomsburg University
PA Instructional II Certification in HVACR and Plumbing



**Model Schedule For HVACR**

| | |
|---|---|
| **Semester 1** | |
| **HVAC 123: OSHA Electrical and Construction Safety** | **1** |
| **HVAC 135: Electricity for HVACR** | **3** |
| **HVAC 138: Lab Practice I: Electrical Applications** | **2** |
| **HVAC 143: HVAC Installation Procedures** | **1** |
| **HVAC 146: Lab Practice II: Installation Procedures** | **2** |
| **HVAC 150: Principles of Refrigeration** | **3** |
| **MATH 126: Technical Math I (or higher)** † | **3** |
| **Science Elective** | **3** |
| **Semester 2** | |
| **HVAC 157: Residential Heating Systems** | **3** |
| **HVAC 160: Lab Practice III: Heating Applications** | **2** |
| **HVAC 167: Refrigerant System Components** | **2** |
| **HVAC 170: Lab Practice IV: Cooling Applications** | **2** |
| **HVAC 175: Refrigerant Management** | **2** |
| **HVAC 180: Mechanical Codes for HVACR** | **1** |
| **MATH 132: Elementary Geometry (or higher)*** | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 3** | |
| **HVAC 206: Air Conditioning Systems*** | **4** |
| **HVAC 216: Systems Installation and Start Up** | **3** |
| **HVAC 256: Load Calculations** | **3** |
| **HVAC 266: Ventilation** | **3** |
| **ENG 221: Public Speaking OR** | |
| **ENG 216: Technical Writing*** | **3** |
| **Humanities Elective** | **3** |
| **Semester 4** | |
| **HVAC 211: Heat Pump Systems** | **3** |
| **HVAC 221: Commercial Refrigeration** | **3** |
| **HVAC 261: Controls of HVACR** | **3** |
| **HVAC 271: System Servicing and Troubleshooting** | **3** |
| **General Studies Elective** | **3** |
| **CIS 105 OR CIS 111** | **3** |
| **Additional General Education Requirements** | |
| **Health and Physical Education Elective** | **1** |
| **TOTAL CREDITS** | **74** |

** Prerequisite or Co-requisite Required. See Course Description.*

*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 132, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.*

# Heating, Ventilation, Air Conditioning, & Refrigeration (HVACR)

### HVAC 123 (1 credit) OSHA Electrical and Construction Safety
This course is designed to meet the requirements that all service technicians must have for training in the rules and regulations of Occupational Safety and Health Administration (OSHA) Construction Safety and Building Maintenance Electrical Safety. Emphasis is on the requirements for compliance, identifying a proper lock-out/tag-out policy, and procedures a technician should follow for safe electrical work.

### HVAC 135 (3 credits) Electricity for HVACR
This course is designed to provide the basic knowledge of electrical theory and application as it pertains to the HVACR industry. The course will emphasize the basic electrical laws and definitions, generation and distribution of electrical power, and the functions of electrical controls and loads, including electrical measurements and testing. Further emphasis is placed on the application of electrical theory as it pertains to the HVACR industry. Wiring diagrams and schematics will be developed and used to wire basic electrical components including testing and troubleshooting electrical circuits.

### HVAC 138 (2 credits) Lab Practice I: Electrical Applications
Practical experience is provided to apply the theory learned concerning electrical components and controls of the HVACR industry. Students demonstrate the proper electrical installations for basic A/C and heating equipment. Emphasis is placed on the installation, testing and start-up operation of motors, relays, thermostats, pressure switches, and other basic controls.

### HVAC 143 (1 credit) HVAC Installation Procedures
This course introduces the basic methods, tools, and materials needed for the installation of the HVACR equipment to students. A foundational study of the purpose of various tools and skills necessary for their safe use is emphasized. Materials and joining methods of various piping, tubing, wiring, and ductwork systems as used in this industry is studied.

### HVAC 146 (2 credits) Lab Practice II: Installation Procedures
This course provides the practical hands-on skill training. Piping practice utilizes various refrigeration trainers and a selection of commonly used A/C and heating equipment. Residential duct systems are installed on working systems. Practice is provided for the development of skills needed for various methods of joining copper tubing, stainless steel natural-gas tubing, plastic, and iron pipe.

### HVAC 150 (3 credits) Principles of Refrigeration
This course provides a study of the basic principles of thermodynamics as applied to the refrigeration cycle. The Mollier diagram is used to display the purpose and operation of the various components used in the system at expected standard operating conditions. The lab portion provides practice in measuring various system performances.

### HVAC 157 (3 credits) Residential Heating Systems
This course provides a basic understanding of different types of oil and natural gas residential heating systems. Emphasis is on proper installation, sequence of operation, and proper maintenance requirements.

### HVAC 160 (2 credits) Lab Practice III: Heating Applications
This lab time provides the hands-on training pertaining to residential heating systems. Typical residential heating systems is utilized in the lab experience to master the skills necessary for proper installation and service. Students practice typical annual servicing, combustion analysis, and efficiency testing of fossil fuel heating systems.

### HVAC 167 (2 credits) Refrigerant System Components
Introduction to residential and light commercial A/C system components. This course details the following components of air conditioner and refrigeration systems: Evaporators, condensers, metering devices, compressors, and other safety and servicing system components. Emphasis is placed on applying the knowledge gained in HVAC 150, along with manufacturer specifications, to determine proper installation and operating conditions of these cooling system components.

### HVAC 170 (2 credits) Lab Practice IV: Cooling Applications
This lab provides the hands-on training for skills necessary to properly install and start-up comfort cooling systems. Students are required to assemble a refrigeration system and test it for proper operation under various conditions.

### HVAC 175 (2 credits) Refrigerant Management
This course is designed to give students the knowledge to understand the laws on venting and handling of the various refrigerants covered in the Clean Air Act–Section 608. A requirement for this course is to take the EPA Technician Certification Exam provided by ARI. Lab practice is provided in refrigerant recovery, recycling, evacuation, and charging various small appliances and high pressure appliances.

### HVAC 180 (1 credit) Mechanical Codes for HVACR
This course introduces HVACR students to the current International Code Council (ICC) codes. The emphasis highlights the sections of these codes that are relevant to the technician for proper HVACR equipment installation. A brief overview of other national and local building codes is also provided.

### HVAC 206 (4 credits) Air Conditioning Systems
Air conditioning benefits, unitary cooling, unitary combination cooling and heating equipment, central station systems, service and problem analysis, and absorption refrigeration system topics are studied.
*Prerequisites: HVAC 150*

### HVAC 211 (3 credits) Heat pump Systems
Covers basic principles, components, and application of heat pump systems.

### HVAC 216 (3 credits) System Installation and Start Up
Codes and standards, heating start-up, heating checkouts, heating operation, AC start-up, AC checkouts, AC operation, heat pump start-up, heat pump checkouts, and heat pump operation are covered.

### HVAC 221 (3 credits) Commercial Refrigeration
Discusses system applications, refrigerated storage, and ice machines.

### HVAC 256 (3 credits) Load Calculations
Covers refrigeration, psychometrics, heating load, and cooling load calculations.

### HVAC 261 (3 credits) Controls of HVAC
Topics include controls, valves, regulators, sensing devices/ fuel controls, residential control systems—heating/cooling, commercial and engineered control systems, and heat pump controls.

### HVAC 266 (3 credits) Ventilation
Students learn about air flow principles/duct design, mechanical and electronic filtration, and fans.

### HVAC 271 (3 credits) System Servicing and Troubleshooting
Refrigeration system problems, electrical troubleshooting, heating service/problem analysis, heat pump service/ problem analysis, and AC service/problem analysis are covered.

# Masonry Construction Technology

## What is Masonry Construction Technology?

Masonry Construction Technology provides the opportunity to develop the skills of a proficient mason, from the simple spreading of mortar to the complex construction of an inside fireplace. These skills are developed by practice projects, which are preceded by theory lectures and demonstrations. Faculty members show films on various aspects of the trade, and students take field trips to learn about the manufacture of masonry products.

Since a large part of masonry work is decorative as well as functional, special emphasis is placed on appreciation of the beauty and permanence of brickwork and on the development of pride in good workmanship.

Students find employment in the field as masons and with experience, as forepersons or superintendents. Many masons are self-employed.

## A Graduate of this Program will be able to:

- Operate masonry tools and equipment safely and effectively.
- Use masonry terminology.
- Read blueprints to estimate materials quantity and pricing.
- Lay out and construct footings and build a block foundation.
- Apply brick veneering to a structure.
- Construct a masonry arch.
- Lay out and set ceramic tile.
- Construct an inside fireplace and chimney.
- Repair older masonry structures.
- Organize personnel and materials at a construction site.
- Provide all masonry options in current residential construction.

**Michael T. Gardner, Instructor**
AAS: Thaddeus Stevens College of Technology

**Chad Hummel, Instructor**
AAS: Thaddeus Stevens College of Technology

## Model Schedule For Masonry Construction Technology

### Semester 1

### Masonry Construction Technology

**Semester 1**

| | |
|---|---|
| MASN 101: Intro to Tools, Safety, and Equipment | 3 |
| MASN 105: Introduction to Masonry Construction | 3 |
| MASN 110: Development of Masonry Materials | 3 |
| MASN 116: Chimney Construction | 3 |
| MATH 126: Technical Math I (or higher) † | 3 |
| ENG 106: English Composition | 3 |

**Semester 2**

| | |
|---|---|
| MASN 155: Block Construction, Bearings & Anchoring Systems | 4 |
| MASN 158: Adhered Concrete Masonry Veneer | 2 |
| MASN 162: Masonry Hardscaping Patios & Retaining Walls | 2 |

**Semester 3**

| | |
|---|---|
| MASN 207: Advanced Masonry Applications | 5 |
| MASN 213: Planning and Management | 3 |
| MASN 216: Blueprint Reading and Estimating | 4 |
| ENG 221: Public Speaking OR ENG 216: Technical Writing | 3 |
| Science : Elective* | 3 |

**Semester 4**

| | |
|---|---|
| MASN 256: Fireplace Construction | 4 |
| MASN 261: Arch Construction | 3 |
| MASN 266: Tile Setting | 2 |
| MASN 271: Footings and Foundations | 3 |
| Humanities Elective | 3 |
| BUSN 106: Small Business Management | 3 |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

*† Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 132, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

# Masonry Construction Technology (MASN)

### MASN 101 (3 credits) Introduction to Tools, Safety and Equipment
Students will be introduced to the tools required for the masonry trade, understand safety standards and practices, and receive training and certifications on various equipment used on a job site.

### MASN 105 (3 credits) Introduction to Masonry Construction
This course will teach the fundamentals of the masonry trade. This will include spreading mortar and striking full joints, laying brick and block to the line, bonding the length and height of a wall, building leads, and hanging a corner pole.

### MASN 110 (3 credits) Development of Masonry Materials
History and the manufacturing of masonry materials. In the manufacturing of materials, there are many different types of brick and block. Students will learn the various names and where the material should be used in a wall. Portland cement comes in different forms and how to properly mix the different types. Students will learn what the different strengths of cement and where they should be used.

### MASN 116 (3 credits) Chimney Construction
Students will understand the difference between and be able to construct properly a single and double flue chimney.

### MASN 155 (4 credits) Block Construction, Bearings, and Anchoring Systems
Students will learn terminology; the placement of anchor bolts, bearing plates, setting lintels, cutting in electrical boxes and door ties. They will be working around conduit, duct work and rebar reinforcement. They will also build a composite wall using block and brick.

### MASN 158 (2 credits) Adhered Concrete Masonry Veneer
Students will learn to use the tools and equipment for installing veneer stone; to apply hanging wire, scratch coat, flashings, vapor barriers, and drain mats; to hang stone; and to point the mortar joints. Students will learn the different types of patterns stone can be laid in.

### MASN 162 (2 credits) Masonry Hardscaping Patios & Retaining Walls
The proper use of masonry products in an outdoor environment. Understand the process to build an outdoor patio and retaining walls using masonry materials.

### MASN 167 (3 credits) Restoration and Building Maintenance
Cover the various materials that go along with masonry products. These would be caulking, waterproofing, patching, repointing, cutting out and repairing damaged areas, and cleaning of masonry. This course will focus on preventive maintenance to stop any further damage of the masonry structure.

### MASN 171 (1 credit) Concrete Sidewalks
Students will learn how to build forms and how to place concrete for a sidewalk.

### MASN 207 (5 credits) Advanced Masonry Applications
Application of skills relative to masonry systems. Includes working on the off-campus housing project. Techniques include firewall construction, brick veneering, porch/patio and step construction, and proper preparation for varying weather conditions.

### MASN 213 (3 credits) Planning and Management
Organizing personnel and materials on a job site; planning and coordinating the placement of equipment and materials; and completing a job on time and within budget. Supervisory duties and responsibilities are also covered.

### MASN 216 (4 credits) Blueprint Reading and Estimating
Basic skills to interpret residential construction drawings. Emphasis on calculation of materials, labor, and equipment necessary to complete selected projects. Proposals and closed bids required.

## MASN 256 (4 credits) Fireplace Construction

Provides history, theory, and function of the fireplace. Students design and construct a fireplace of their choice with emphasis on proper terminology, workmanship, and various components of different fireplaces.

## MASN 261 (3 credits) Arch Construction

Provide the skills necessary to build various types of arches. Terminology, different types, and various techniques used in the construction of arches are taught.

## MASN 266 (2 credits) Tile Setting

The basics of ceramic tile setting are covered. Emphasis is placed on terminology, tools, safety, and proper layout.

## MASN 271 (3 credits) Footings and Foundations

Provides the opportunity to layout and construct a residential concrete block foundation. Topics include blueprint interpretation, materials estimating, installation of anchor bolts, partition construction, and the use of the transit for site layout.

# Mechanical Engineering Technology

## What is Mechanical Engineering Technology?

The Mechanical Engineering Technology program prepares graduates for entry-level employment in the mechanical engineering field. The skills acquired from this course of study allow the student to visualize objects in three dimensions, describe objects with manual and computer-aided drafting (CAD) techniques, and apply mechanical engineering principles to design products, tools, and equipment for a manufacturing-oriented industry. The program's affiliations with industry are maintained through an advisory committee and the Society of Manufacturing Engineers (SME).

The student's skills are developed with a comprehensive exposure to the concepts of orthographic projection, sectioning, and isometric drawing with an emphasis on instrument drawing techniques. A thorough understanding of geometric dimensioning and tolerancing (GDT) and a demonstrated proficiency with the latest CAD software complement these skills. Additional training in fabrication principles, mechanical design, product design, and manufacturing processes provides a well-rounded experience with mechanical design and manufacturing technology.

The principles of mechanical engineering are mastered by studying the motion of mechanical objects and the underlying concepts required to understand how a machine functions or a manufacturing process is performed. By studying the practical aspects of structured programming, parametric feature-based design, and solid modeling, the student gains the skills necessary to utilize the computer as a design tool. Further studies in fluid mechanics, production design, engineering materials, thermodynamics and heat transfer, machine design, and related engineering topics allow the student to build upon these concepts. Practical applications of these concepts are further realized as the student completes an internship project during the fourth semester.

Upon entering the work place, the graduate can expect to assist engineers and scientists in the design and development of new products. As work experience is acquired, the graduate can expect to gain more design responsibility and thereby become a key member of an engineering team.

## A Graduate of this Program will be able to:

- Produce detail, subassembly, and full-assembly engineering drawings utilizing manual and computer-aided drafting techniques.
- Recognize and apply the ASME Y14.5 guidelines in the creation of engineering drawings.
- Utilize ASME Y14.5 geometric dimensioning and tolerancing guidelines for establishing and maintaining the functional fit of mating parts.
- Apply industrial practices in the design and fabrication of sheet-metal components, welded assemblies, and piping systems.
- Identify and understand manufacturing processes and their effect on the cost and/or function of manufactured products.
- Analyze and design mechanical parts and systems for static and dynamic loading conditions.
- Apply engineering principles for determining the effects of stationary and moving fluids and the control and transformation of energy.
- Design manufacturing tooling for locating, clamping, forming, piercing, blanking, and/or shaping a given part.
- Employ structured programming techniques and utilize computer software tools to design and analyze mechanical parts or systems.
- Select and apply engineering materials for use in the design and manufacture of mechanical components.
- Analyze and design machine elements such as gears, shafts, bearings, clutches, brakes, flywheels, and related assemblies.
- Apply engineering problem-solving skills to complete a project on time and within budget.

**Amy Jo Mumma-Frank, Professor**
BA: Elizabethtown College

**Christopher Way, Instructor**
BS: The University of Iowa

**Model Schedule for Mechanical Engineering Technology (Option #1)**

| | |
|---|---|
| **Semester 1** | |
| MET 101: Drafting Fundamentals | 3 |
| MET 106: Engineering Graphics^ | 3 |
| MET 116: Computer-Aided Drafting^ | 3 |
| MET 176: Manufacturing Processes^ | 3 |
| MATH 137: Intermediate Algebra (or higher) †^ | 3 |
| ENG 106: English Composition^ | 3 |
| **Semester 2** | |
| MET 111: Engineering Standards* | 3 |
| MET 161: Fabrication Principles* | 3 |
| MET 166: Mechanical Design | 3 |
| MET 171: Product Design* | 3 |
| PHYS 207: Statics and Strength of Materials*^ | 3 |
| MATH 141: Trigonometry (or higher) *^ | 3 |
| **Semester 3** | |
| MET 201: Engineering Mechanics*^ | 3 |
| MET 206: Fluid Mechanics*^ | 3 |
| MET 211: Production Design*^ | 3 |
| MET 216: Parametric Solid Modeling*^ | 3 |
| ENG 216: Technical Writing*^ | 3 |
| PHYS 213: General Physics I*^ | 4 |
| **Semester 4** | |
| MET 261: Engineering Materials* | 3 |
| MET 266: Thermodynamics* | 3 |
| MET 271: Machine Design* | 3 |
| MET 276: Engineering Seminar* | 3 |
| Humanities Elective | 3 |
| General Studies Elective | 3 |
| **TOTAL CREDITS** | **73** |

**Model Schedule for Mechanical Engineering Technology (Option #2)**

| | |
|---|---|
| **Semester 1** | |
| MET 101: Drafting Fundamentals | 3 |
| MET 106: Engineering Graphics^ | 3 |
| MET 116: Computer-Aided Drafting^ | 3 |
| MET 176: Manufacturing Processes^ | 3 |
| MATH 207: Precalculus (or higher) †^ | 4 |
| ENG 106: English Composition^ | 3 |
| **Semester 2** | |
| MET 111: Engineering Standards* | 3 |
| MET 161: Fabrication Principles* | 3 |
| MET 166: Mechanical Design | 3 |
| MET 171: Product Design* | 3 |
| PHYS 207: Statics and Strength of Materials*^ | 3 |
| General Studies Elective | 3 |
| **Semester 3** | |
| MET 201: Engineering Mechanics*^ | 3 |
| MET 206: Fluid Mechanics*^ | 3 |
| MET 211: Production Design*^ | 3 |
| MET 216: Parametric Solid Modeling*^ | 3 |
| ENG 216: Technical Writing*^ | 3 |
| PHYS 213: General Physics I*^ | 4 |
| **Semester 4** | |
| MET 261: Engineering Materials* | 3 |
| MET 266: Thermodynamics* | 3 |
| MET 271: Machine Design* | 3 |
| MET 276: Engineering Seminar* | 3 |
| Humanities Elective | 3 |
| General Studies Elective | 3 |
| **TOTAL CREDITS** | **74** |

** Prerequisite or Co-requisite Required. See Course Description.*
*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MA*
*^ Minimum Grade Required. See Course Description.*

# Mechanical Engineering Technology (MET)

### MET 101 (3 credits) Drafting Fundamentals
An introductory course in the basics of instrument drawing, lettering, geometric construction, and associated manual drafting techniques.

### MET 106 (3 credits) Engineering Graphics
A study of orthographic projection and the creation of engineering drawings with applications in sectioning and auxiliary views. This course also includes isometric drawing and practice in freehand sketching.

### MET 111 (3 credits) Engineering Standards
A study of the American Society of Mechanical Engineers (ASME) dimensioning guidelines including geometric dimensioning and tolerancing (GD&T) for the design and manufacture of interchangeable mechanical parts.
*Prerequisites: MET 106 and MET 116 (Both with final grade of C or higher or instructor permission)*

### MET 116 (3 credits) Computer-Aided Drafting (CAD)
An introduction to computer-aided drafting and its applications. The student will learn the fundamentals of using the computer operating system and the CAD program. These skills are affirmed with the completion of a series of mechanical drawings.

### MET 161 (3 credits) Fabrication Principles
A study of the industrial practices in the design and fabrication of sheet-metal components, welded assemblies, and piping systems.
*Prerequisite: MET 116 (With final grade of C or higher or instructor permission)*

### MET 166 (3 credits) Mechanical Design
A study of power transmission fundamentals and design- related computations. Design applications include sizing and/or selection of belts, chains, gears, bearings, couplings, shafts, cams, linkages, and electric motors.

### MET 171 (3 credits) Product Design
The practical implementation of the mechanical design practices, engineering standards, and computer-aided drafting techniques as they relate to the design and fabrication of a manufactured product.
*Prerequisites: MET 106 and MET 116 (Both with final grade of C or higher or instructor permission)*

### MET 176 (3 credits) Manufacturing Processes
A comprehensive study of the processing of materials as it relates to manufacturing. In this course, class lectures and literature review will be combined with machine shop practice and plant visits to form a well-rounded understanding of the intricacies of manufacturing technology

### MET 201 (3 credits) Engineering Mechanics
An introduction to the analysis of the static and dynamic forces which govern the behavior of structures and machines. The analytic skills in vector mechanics established in this course are employed for the design of structural components and assemblies as well as machine elements such as cams, gears, and linkages.
*Prerequisites: MATH 137, MATH 141 and PHYS 207 (All with final grade of C or higher or instructor permission)*
*Co-requisite: PHYS 213*

### MET 206 (3 credits) Fluid Mechanics
A study of the effects of stationary and moving fluids as it relates to the analysis and design of mechanical systems. Topics involving the volume and energy transfer of a working fluid are utilized to demonstrate the problems commonly encountered in industry.
*Prerequisites: MATH 137, MATH 141 and PHYS 207 (All with a final grade of C or higher or instructor permission)*
*Co-requisite: MET 201 and PHYS 213*

### MET 211 (3 credits) Production Design
An introductory course in manufacturing engineering and lean production methods. Major topics include manufacturing processes, economics of production design, and design of manufacturing systems.
*Prerequisite: MET 176 (With a final grade of C or higher or instructor permission)*
*Corequisite: MET 216*

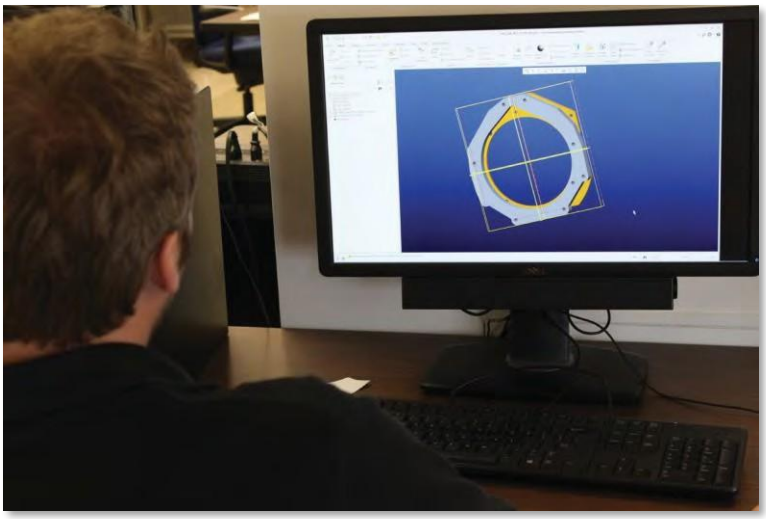
### MET 216 (3 credits) Parametric Solid Modeling
An intermediate computer-aided drafting course in three- dimensional, feature-based, parametric solid modeling with applications in the designing and detailing of mechanical components and assemblies. Applications include structured programming with practical applications in the creation and modification of solid models for complex parts, assemblies, and related engineering drawings.
*Prerequisite: MET 116 (With final grade of C or higher or instructor permission)*

## MET 261 (3 credits) Engineering Materials

An introduction to the selection and utilization of engineering materials as they relate to their mechanical characteristics under various operating conditions. Material strength and failure criteria are utilized to identify design margins of safety for mechanical components.
*Prerequisites: MET 176, ENG 106, ENG 216, PHYS 207, and PHYS 213 (All with final grade of C or higher or instructor permission)*

## MET 266 (3 credits) Thermodynamics

An introduction to the principles which govern the control and transformation of energy. These principles provide a concise description of the processes that are common to boiler, refrigeration, and related systems.
*Prerequisites: MET 206 and PHYS 213 (Both with final grade of C or higher or instructor permission)*



## MET 271 (3 credits) Machine Design

A study of the design of machine elements such as gears, shafts, bearings, clutches, brakes, flywheels, and related assemblies. These concepts will be employed by the student through structural analysis of numerous machine elements.
*Prerequisites: MET 201, MET 216, and PHYS 213 (All with final grade of C or higher or instructor permission)*

## MET 276 (3 credits) Engineering Seminar

A review course for the fundamentals of manufacturing including engineering economics and special topics of engineering technology. This course also covers engineering internship projects, technical presentations, and preparation for SME certification examination.
*Prerequisites: MET 211 and MET 216 (Both with final grade of C or higher or instructor permission)*
*Co-requisites: MET 261, MET 266, and MET 271*

# Metals Fabrication & Welding

## What is Metals Fabrication and Welding Technology?

Metals Fabrication and Welding Technology provides the student with a working knowledge of the various tools, equipment, and modern techniques used in the metals fabrication, mechanical installation, and welding industries. The proper application of various layout, fabrication, and assembly techniques for specific designs in sheet metal, plate, structural metals and pipe will be stressed. Students will design, estimate, fabricate, and install projects relative to air handling systems and structural and miscellaneous fabricated systems. Proper and safe work habits must be developed due to the nature of the equipment necessary to be successful in the industry.

The understanding and mastery of layout techniques is an essential component for success in the metals fabrication and welding fields. Therefore, disciplines in the basic, parallel line, radial line, and triangulation methods of layout are covered. Also, instruction in blueprint reading relative to the manufacturing and construction industries will be required. Included are components in drafting, orthographic projection, and symbol interpretation. Gas metal arc, shielded metal arc, gas tungsten arc, oxy-acetylene, and flux core arc welding will be studied and practiced to allow students to obtain skills for a total understanding of fabricated projects from design through the final assembly processes.

Graduates of the Metals Fabrication and Welding Technology program are prepared to work in businesses and industries that design, build, and install products that have been fabricated from sheet, plate, and structural metals. Areas of employment include the following:

- HVAC sheet metal duct systems fabrication & installation
- Precision sheet metal layout and fabrication
- Welding
- Industrial maintenance/millwright
- Plate layout/fitter for industrial fabrication
- Mechanical systems estimator/project manager
- Fabrication machinery operator
- Equipment manufacturing and installation
- Structural steel and miscellaneous iron fabrication
- Automated cutting systems operation programming
- Sales - industrial equipment or contractor
- Shop/installation foreperson
- Fabrication of sanitary stainless-steel products
- Food and pharmaceutical processing applications
- Industrial ventilation fabrication and installation

## A Graduate of this Program will be able to:

- Demonstrate the ability to perform technical work related to welding, structural steel fabrication, sheet metal, and plate fabrication, applying OSHA and other applicable safety standards to work safely.
- Apply concepts of geometry, trigonometry, and physics to develop, to lay out, to fit, and to weld various fittings, structures, and systems associated with industrial and commercial metals fabrication.
- Identify and demonstrate correct use of various hand and power tools used in the fabrication industry.
- Demonstrate the ability to develop and interpret blueprints using accepted practices of orthographic projection.
- Determine set-up effectiveness of shop equipment and develop methods of manufacturing various products.
- Keep accurate records of project work, time expended, materials used, and costs incurred associated with a given job.
- Demonstrate a comprehension of business practices related to the metals fabrication industry.
- Estimate the costs associated with design, fabrication, and installation of various structural, sheet metal, or maintenance projects.
- Demonstrate basic oral communication skills, speak logically, and use various types of oral and written communication techniques to promote good business relationships, to develop leadership, and to establish good employer, customer, and employee relationships.
- Demonstrate competency in the simple, parallel line, radial line, and triangulation methods of layout to develop elbows, transitions, and tees in both round and rectangular forms.
- Understand industry standards of quality.
- Demonstrate the ability to choose the proper materials and fabrication and welding procedures for given projects.
- Be prepared to accept the challenges and responsibilities of the metals fabrication industry, knowing the full range of employment and advancement possibilities.

**Joseph Battle, Instructor**
AAS: Thaddeus Stevens College of Technology

**Stacy Gillis, Instructor**
AAS: Thaddeus Stevens College of Technology

**Jim Stewart, Instructor**
BS: Franklin University
AAS: Harrisburg Area Community College

**Christopher Unruh, Instructor**
AAS: Thaddeus Stevens College of Technology

## Model Schedule for Metals Fabrication & Welding Technology

| | |
|---|---|
| **Semester 1** | |
| MFWT 106: Gas Metal Arc Welding/Plasma Arc Cutting | 3 |
| MFWT 111: Metals Fab I: Intro to Hand & Machine Processes | 3 |
| MFWT 121: HVAC Duct Design and Fabrication* | 3 |
| MFWT 126: Drafting Fundamentals | 3 |
| MATH 137: Intermediate Algebra (or higher) † | 3 |
| CIS 105: Drawing with Auto Cad* (must take before MFWT 222) | 3 |
| **Semester 2** | |
| MFWT 154: Flux Corded Arc Welding/ Oxy-Acetylene Cutting and Welding* | 4 |
| MFWT 162: Metals Fabrication II: Parallel* Line Development Machine Processes | 4 |
| MFWT 167: Metals Fabrications II: Parallel Line Development and Machine Processes* | 2 |
| MFWT 171: Materials of the Trade and Applied Metallurgy | 2 |
| MATH 132: Elementary Geometry (or higher)* See Physics Elective for Math Requirement* | 3 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 3** | |
| MFWT 207: Shielded Metal Arc Welding* | 4 |
| MFWT 212: Metals Fabrication III: Triangulation Pattern Machine Processes* | 4 |
| MFWT 222: Industrial Applications II: CNC Applications and Estimating* | 4 |
| Physics Elective: PHYS 101, PHYS 106, PHYS 113,or PHYS 213 (must take MATH 141 for PHYS 113 or PHYS 213)* | 3 |
| ENG 106: English Composition | 3 |
| **Semester 4** | |
| MFWT 257: Gas Tungsten Arc Welding* | 4 |
| MFWT 262: Metals Fabrication IV: Radial Design Development & Machine Processes* | 4 |
| MFWT 267: Industrial Applications III: Print Reading for Welding* | 4 |
| ENG 216: Technical Writing* | 3 |
| Humanities Elective | 3 |
| **Additional General Education Requirements** | |
| HEAL 106 or HEAL 111 | 1 |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

*† Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 132, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

# Metals Fabrication & Welding Technology (MFWT)

### MFWT 106 (3 credits) Gas Metal Arc Welding/Plasma Arc Cutting

Provides a thorough technical understanding of welding safety, gas metal arc welding fundamentals, gas metal arc equipment adjustments, metal transfer, and shielding gases. Provides training to develop the manual skill necessary to make high quality gas metal arc welds in all positions on mild steel from 1/16" to 3/8" thickness with single and multiple passes, using short circuit transfer.

### MFWT 111 (3 credits) Metals Fabrication I: Introduction to Hand and Machine Processes

Introduction to tools, materials, and equipment required to fabricate basic sheet metal projects. Students develop an understanding of seaming, hemming, and fastening techniques. Safety standards according to Occupational Safety and Health Administration (OSHA) are covered.

### MFWT 121 (3 credits) HVAC Duct Design and Fabrication

Teaches how to properly design and fabricate duct systems relative to low-pressure HVAC systems. Machinery, seaming, connecting, and basic layout techniques are covered. Course includes the interpretation of applicable Sheet Metal and Air Conditioning Contractors National Association (SMACNA) codes for duct construction.
*Prerequisite: MFWT 111*

### MFWT 126 (3 credits) Drafting Fundamentals

Introduction to drafting and sketching techniques. Major topics include geometric construction, drafting equipment, and orthographic projections. Mechanical drawing required.

### MFWT 154 (4 credits) Flux Corded Arc Welding/ Oxy-Acetylene Cutting and Welding

Offers a technical understanding of Flux cored arc welding and oxy-acetylene welding, flame cutting, brazing fundamentals, and welding safety. Training for manual skill necessary to produce high quality welds on mild steel in all positions. Manual and mechanized flame cutting and brazing mild steel also included.
*Prerequisite: MFWT 111*

### MFWT 162 (4 credits) Metals Fabrication II: Parallel Line Development and Machine Processes

Instruction in the use of precision measuring tools and saws. Use of parallel line method of pattern development for fabrication of elbows, tees, and offsets using sheet metal, pipe, and plate materials are covered.
*Prerequisite: MFWT 111*

### MFWT 167 (2 credits) Metals Fabrications II: Parallel Line Development and Machine Processes

Discusses the equipment used in the various fabrication and welding trades, such as sheet and plate products plus structures, tubing, pipe, and the various alloys of steel, aluminum and stainless steel. Included is the application of metals for industrial, commercial, and manufacturing design. *Prerequisite: MFWT 111*

### MFWT 171 (2 credits) Materials of the Trade and Applied Metallurgy

Covers the common materials, designations, and methods of measurement used in the various fabrication and welding trades. Sheet and plate products plus structures, tubing, pipe, and the various alloys of steel, aluminum, and stainless steel are discussed.

### MFWT 207 (4 credits) Shielded Metal Arc Welding

Provides students with a thorough technical understanding of shielded metal arc welding fundamentals, welding safety, welding machines, and electrode classifications and selections. It also provides training to develop the manual skill necessary to produce high quality shielded metal arc welds in all positions on mild steel from 16 gage to 1" plate with single and multiple passes. The welding process using mild steel electrodes with low hydrogen and iron powder flux coatings while using AC and DC power sources is covered.
*Prerequisite: MFWT 106*

### MFWT 212 (4 credits) Metals Fabrication III: Triangulation Pattern

Developmental and advanced machine processes designed to introduce students to the triangulation method of pattern development. Using this discipline of pattern development, students design, lay out, and fabricate transitions, Y-branches and other irregular fittings related to sheet metal, piping, and miscellaneous plate fabrication according to job specifications. Students also learn advanced machinery set-up techniques relative to the fabrication of components designed using this layout process. Instruction in the use of precision measuring tools, iron workers, press brakes, and saws are also major topics covered.
*Prerequisites: MFWT 111 and MFWT 161*

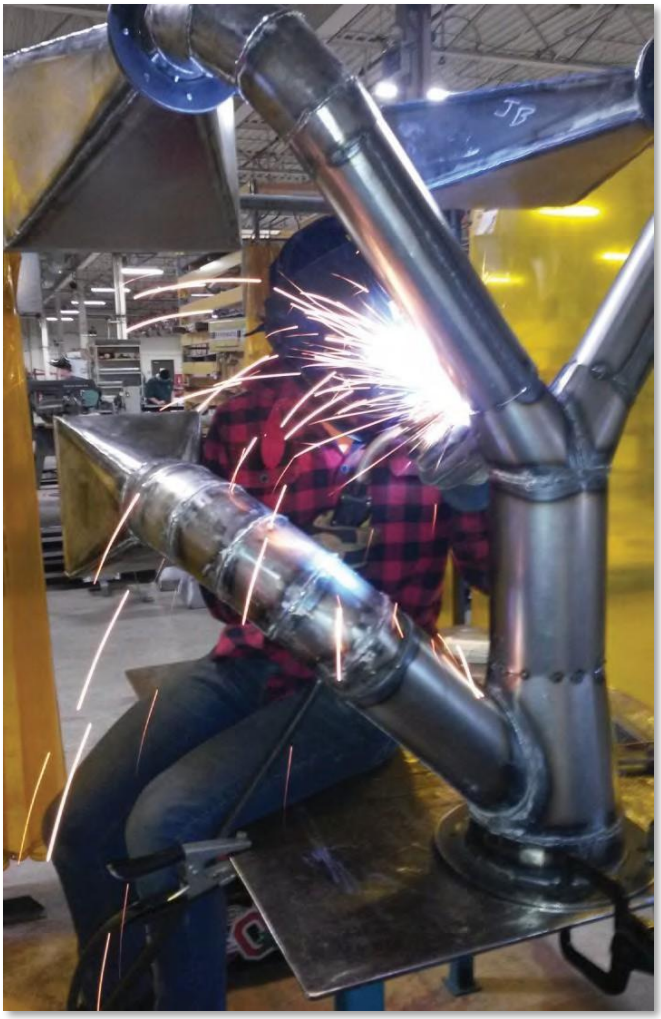
*Prerequisite: MFWT 167*

## MFWT 222 (4 credits) Industrial Applications II: CNC Applications and Estimating

The major objective of this course is to introduce students to aspects of programming and utilizing computer-controlled plasma and oxy-fuel cutting systems. Students use AutoCAD® and MTC ProNest software packages to produce duct, weldment, and miscellaneous profile parts from blueprints, sketches, and field measurements. Programmed parts are then nested and cut on given sheet or plate sizes using state-of-the-art computer numerical control (CNC) systems or plasma cutting system. Layout techniques previously learned for profile programming jobs are utilized. Other topics covered in this course are project management and estimating.
*Prerequisites: MFWT 161 and CIS 105*

## MFWT 257 (4 credits) Gas Tungsten Arc Welding

Provides students with a thorough understanding of gas tungsten arc welding fundamentals, arc characteristics, and welding safety. It provides training to develop the manual skill necessary to make high quality gas tungsten arc welds in all positions on 16- and 11-gage mild steel, 16- and 11-gage aluminum, also 16-gage stainless steel using both alternating and direct current. In addition, material is presented on the weld characteristics of carbon steel, stainless steel, and aluminum. The use of abrasives and other clean-up techniques to produce quality USDA and FDA finishes is covered. Instruction on the use of purging is also given.
*Prerequisite: MFWT 106*



## MFWT 262 (4 credits) Metals Fabrication IV: Radial Design Development and Machine Processes

This course is designed to instruct students in the use of the radial line method of pattern development. Students lay out and fabricate various sheet metal and plate fittings such as cones, reducers, and take-off branches using this technique. Fittings are then welded using processes previously learned.
*Prerequisite: MFWT 111*

## MFWT 267 (4 credits) Industrial Applications III: Print Reading for Welding/ Field Equipment and Rigging

Selected on- and off-campus projects are utilized to reinforce previous instruction. Opportunity to study and to evaluate projects to learn various aspects of industry. Applicable codes and standards are used to ensure proper design and applications of materials and processes are covered. Also included are the interpretation of welding blueprints and applications in field equipment and rigging.

# Plumbing Technology

## What is Plumbing Technology?

Students in the Plumbing Technology program learn how to design, install, and repair residential and commercial plumbing systems and hydronic heating systems. Some of the skills acquired are joining different types of piping materials, reading blueprints, and installing and repairing boilers, plumbing fixtures, faucets, and water heaters.

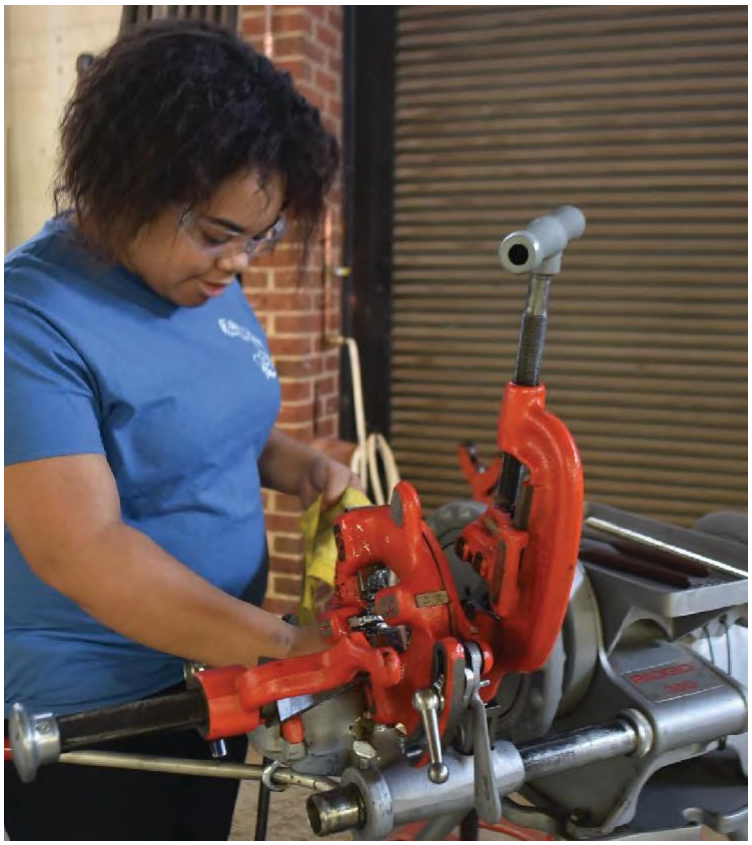
Employment opportunities in the plumbing and pipe- fitting industries include the installation of plumbing and heating systems in new buildings and the installation and maintenance of plumbing, heating, and piping systems for industries, public utilities, or government agencies. Self-employment is another option. Many graduates become self-employed plumbers after completing their apprenticeships.

## A Graduate of this Program will be able to:

- Apply safety principles and demonstrate good work habits in the trade.
- Use the hand and power tools of the trade.
- Identify piping materials and install them using proper connections.
- Use and apply trade terms and technical data.
- Read and interpret blueprints, specifications, and codes as they apply to the trade.
- Lay out, estimate, calculate, and use mathematical skills as required in the trade.
- Install, maintain, and repair plumbing, heating, and mechanical systems and equipment.
- Keep abreast of new developments in the field.
- Demonstrate the ability to write letters of application, memos, work orders, reports, and apply communication skills in the world of work.

**Skyle Major, Instructor**
AAS: Thaddeus Stevens College of Technology

**Kemon Papadimitriou, Instructor**
AAS: Thaddeus Stevens College of Technology



**Model Schedule for Plumbing Technology**

| | |
|---|---|
| **Semester 1** | |
| PLBG 107: The Plumbing Trade | 3 |
| PLBG 112: Plumbing Design I: Introduction to Plumbing Systems | 3 |
| PLBG 117: Plumbing Installation I (a) Plumbing Materials | 3 |
| PLBG 122: Plumbing Installation I (b) Plumbing Tools | 1.5 |
| PLBG 130: Construction Blueprint Reading | 1.5 |
| MATH 126: Technical Math I (or higher) †^ | 3 |
| ENG 106: English Composition | 3 |
| Health and Physical Education Elective | 1 |
| **Semester 2** | |
| PLBG 156: Plumbing Design II: Blueprint Reading* | 3 |
| PLBG 170: Plumbing Installation II (a) Underground/Aboveground Rough In* | 3 |
| PLBG 176: Plumbing Installation II (b) Fixture Installation* | 3 |
| PLBG 167: Plumbing Service I: Introduction to Plumbing Service* | 3 |
| MATH Elective: MATH 136 Technical Math II* (or higher) OR *MATH 132: Elementary Geometry (or higher) | 3 |
| CIS 111: Intro to Computer Applications | 3 |
| **Semester 3** | |
| PLBG 207: Plumbing Design III: Plumbing Codes* | 3 |
| PLBG 213: Plumbing Installation III* | 3 |
| PLBG 216: Plumbing Installation IV: Commercial Plumbing Installation* | 3 |
| PLBG 223: Plumbing Service II: Advanced Plumbing Services* | 3 |
| Science Elective | 3 |
| Humanities Elective | 3 |
| **Semester 4** | |
| PLBG 256: Plumbing Design IV: Designing Hydronic Heating Systems* | 3 |
| PLBG 262: Plumbing Installation V: Installing Hydronic Heating Systems* | 3 |
| PLBG 267: Plumbing Service III: Servicing Hydronic Heating Systems | 3 |
| PLBG 272: Plumbing Installation VI | 3 |
| General Studies Elective | 3 |
| BUSN 106: Small Business Management | 3 |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

†*Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 136 (or MATH 132), must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*
*^ Minimum Grade Required. See Course Description*

# Plumbing Technology (PLBG)

### PLBG 107 (3 credits) The Plumbing Trade
Prepares students for their role in the Plumbing Technology program at Thaddeus Stevens College and for their future in the field. Examines organizational skills, safe work habits, and proper work attitude. Surveys the history of plumbing
while also offering an examination of job opportunities and an analysis of steps in career progressions.

### PLBG 112 (3 credits)
### Plumbing Design I: Introduction to Plumbing Systems
Study of potable water, methods of sewage disposal, components of plumbing systems, and basic physics as related to plumbing.

### PLBG 117 (3 credits) Plumbing Installation I(a): Plumbing Materials
Familiarizes students with the proper selection and use of all the materials (cast iron, steel, copper, plastics, and others) of the plumbing and pipefitting trades.

### PLBG 122 (1.5 credits) Plumbing Installation I(b): Plumbing Tools
Familiarizes students with the proper selection and use of all the basic tools (hand tools, power tools, and torches) of the plumbing and pipefitting trades, including measurement and other applied math.

### PLBG 130 (1.5 credits) Construction Blueprint Reading
Introduces students to construction prints and documents. Basic drawing symbols and line forms are explained, and the course covers the use of basic drawing tools, dimensioning, and single line pipe drawing methods and practices.

### PLBG 156 (3 credits) Plumbing Design II: Blueprint Reading
Focus on residential piping system design. Skills covered include the following: designing systems; reading blueprints; making orthographic and isometric pipe sketches and drawings; sizing potable water systems; sizing DWV systems; and sizing natural gas systems.
*Prerequisite: PLBG 122*

### PLBG 167 (3 credits) Plumbing Service I: Introduction to Plumbing Service
Focuses on the selection and use of tools and procedures for servicing and repairing plumbing systems. Skills include troubleshooting and repairing faucets and valve, leaking pipes, clogged drains, and toilets.
*Prerequisite: PLBG 170 and PLBG 175*

### PLBG 170 (3 credits) Plumbing Installation II(a): Underground And Aboveground Rough-In
Introduces the student to the installation of residential potable and DWV (drainage, waste, and vent) piping systems and the support of those systems.
*Prerequisites: PLBG 111, PLBG 115, and PLBG 120*

### PLBG 176 (3 credits) Plumbing Installation II(b): Fixture Installation
Introduces the student to bathroom and kitchen fixtures and water heaters. Discusses the installation of residential piping systems, bathroom/kitchen fixtures, and water heaters.
*Prerequisites: PLBG 111, PLBG 115, and PLBG 120*

### PLBG 207 (3 credits) Plumbing Design III: Plumbing Codes
By examining the 2015 International Plumbing Code, this course prepares students to design, install, and maintain plumbing systems in compliance with this statewide code. The course features the proper use of materials and fittings, correct venting, methods for testing plumbing systems, and the sizing of potable water, drainage waste and vent, storm water drainage, and natural gas piping systems.
*Prerequisites: PLBG 107, PLBG 112*

### PLBG 213 (3 credits) Plumbing Installation III
An advanced residential plumbing course that is basically concerned with the plumbing of the housing project. Shop practice is made available as needed, but most instruction occurs at the housing project.
*Prerequisite: PLBG 107*

### PLBG 216 (3 credits) Plumbing Installation IV: Commercial Plumbing Installation
Covers the design and installation of compressed air piping systems, storm water drainage systems, specification fittings and fixtures, and commercial sanitary drainage and venting, and potable water systems. Students learn to read commercial blueprints and to acquire information from specification literature, applying this information in developing the capstone project, a complete and functioning commercial toilet room facility.
*Prerequisite: PLBG 117*

### PLBG 223 (3 credits) Plumbing Service II: Advanced Plumbing
Services An extension of PLBG 166. Covers the tools and procedures to repair flushometer valves, water heaters, frozen pipes, water hammer, and backflow.
*Prerequisite: PLBG 167*

## PLBG 256 (3 credits) Plumbing Design IV: Designing Hydronic Heating Systems

Designing and sizing hydronic heating systems is taught. Includes the calculation of heat loss.
*Prerequisite: PLBG 122*

## PLBG 262 (3 credits) Plumbing Installation V: Installing Hydronic Heating Systems

Students learn the proper installation of residential and commercial hot water heating systems.
*Prerequisite: PLBG 117*

## PLBG 267 (3 credits) Plumbing Service III: Servicing Hydronic Heating Systems

Heating service, including repair of hot water circulation problems, combustion testing, oil burner, and gas burner repair, boiler clean-up, and system troubleshooting are covered.
*Prerequisite: PLBG 167*

## PLBG 272 (3 credits) Plumbing Installation VI

Includes hands-on experience and training in the installation of plumbing fixtures, appliances, and the finished piping in a permanent structure. Work is done on the housing project and other appropriate projects around the campus.
*Prerequisite: PLBG 213*

# Residential Remodeling Technology

## What is Residential Remodeling Technology?

Residential Remodeling has become an essential part of the construction industry. Remodelers add living space to existing homes and retrofit homes to modern conveniences and updated building codes. Remodeling can be done not only for cosmetic purposes but also for structural reasons, as well as to increase the energy efficiency of older homes.

Jobs available in the residential remodeling field include but are not limited to carpenters; painters; drywall and ceiling tile installers; roofers; woodworkers; kitchen and bath remodelers; siding, roofing, and aluminum installers; and flooring specialists.

Upon graduation, students of the Residential Remodeling Technology program will have a number of different opportunities available. In addition to working in their field, graduates will also have the chance to continue their education in areas such as project management, technical education, residential designer, vv, and structural engineering degrees. Advanced opportunities as crew leaders, supervisors, assistant supervisors, superintendents and small business owners may also be possible for graduates of the program.

## A Graduate of this Program will be able to:

- Understand the history of residential buildings in the 20th and 21st centuries.
- Demonstrate basic carpentry woodworking skills.
- Demonstrate successful use of basic and advanced tools of the profession.
- Read blueprints to lay out projects necessary to complete tasks.
- Calculate material quantities and estimate time allowances for projects using mathematical skills required in the profession.
- Apply remodeling skills necessary for interior, exterior, kitchen, and bathroom projects.
- Operate masonry tools and equipment safely and effectively.
- Complete basic masonry repairs.
- Identify and rectify basic plumbing problems in an existing dwelling.
- Troubleshoot basic electrical circuits found in a dwelling.
- Practice safety in the lab and on-site environments.
- Demonstrate a strong work ethic and the ability to work both independently and as a contributing member of a team.
- Stay current with any new technology or codes related to remodeling.

**Loren Bishop, Instructor**
BS: Eastern University OSHA Certified Outreach Instructor

**Joseph Kiely, Instructor**
AAS: Thaddeus Stevens College of Technology

**Matthew Krupa, Instructor**
Darden Executive Business Certificate: University of Virginia
BS: Pennsylvania College of Technology
AAS: Thaddeus Stevens College of Technology
OSHA: Construction Safety & Health Certificate
BCSP: Board of Certified Safety Professionals - Safety Trained Supervisor

**Andrew Snavely, Instructor**
BS: The Pennsylvania State University

**Model Schedule for**
**Residential Remodeling Technology**

| | |
|---|---|
| **Semester 1** | |
| RMDL 106: Hand Tools and Power Tools | 3 |
| RMDL 111: Building Materials | 3 |
| CARP 157: Floor, Wall, and Ceiling Framing | 3 |
| CARP 182: Blueprint Reading | 3 |
| MATH 126: Technical Math I (or higher) † | 3 |
| ENG 106: English Composition | 3 |
| **Semester 2** | |
| CARP 116: Building Site and Foundations | 3 |
| CARP 161: Stair Construction and Remodeling | 2 |
| CARP 166: Roofing and Exterior Finishes | 3 |
| CARP 178: Exterior and Interior Finishes | 4 |
| CIS 111: Intro to Computer Application (must take before RMDL 216)* | 3 |
| MATH 132: Elementary Geometry (or higher)* | 3 |
| **Semester 3** | |
| RMDL 206: Remodeling Drafting & Design* | 3 |
| RMDL 210: Demolition & Stabilization* | 2 |
| RMDL 216: Estimating & Scheduling* | 3 |
| RMDL 221: Remodeling Electro-Mechanical Systems | 2 |
| RMDL 250: Insulation and Weatherization | 2 |
| Science Elective* | 3 |
| ENG 216: Technical Writing OR ENG 221: Public Speaking* | 3 |
| **Semester 4** | |
| CARP 272: Site Work and Foundations II | 2 |
| RMDL 260: Kitchen & Bath Remodeling* | 3 |
| RMDL 271: Advanced Interior Finishes* | 4 |
| RMDL 280: Advanced Exterior Finishes* | 3 |
| BUSN 106: Small Business Management | 3 |
| Humanities Elective | 3 |
| **Additional General Education Requirements** | |
| Health and Physical Education Elective | 1 |
| **TOTAL CREDITS** | **74** |

** Prerequisite or Co-requisite Required. See Course Description.*

†*Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 132, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.*

# Residential Remodeling Technology (RMDL)

### RMDL 106 (3 credits) Hand Tools and Power Tools
This course is a general introduction to the basic tools that are used by a carpenter with an emphasis on safety, proper usage and procedures, and various applications that are most commonly used in the carpentry trades.

### RMDL 111 (3 credits) Building Materials
This course covers the wide range of building materials used in carpentry, from the many different types of wood products used to the newest technology of steel framing. Proper procedures for estimating these building materials to the variety of fastening methods are also covered. Building anatomy from the 1940s and prior up to and including present is discussed.

### CARP 116 (3 credits) Building Site and Foundations
In this course, students learn how to set up and operate the transit level and laser level. Building layout and excavation of residential construction will be explained, with particular emphasis on building stake-off. Types of footers, foundations, and concrete forming are also explored. Students will be challenged to practice proper building site layout, constructing concrete stair and sidewalk forms, and installing the form-a- drain system.

### CARP 182 (3 credits) Blueprint Reading
In this course students will learn the proper techniques necessary to dissect a set of residential blueprints and develop a broad understanding of the language of construction drawings. We will also become involved in duplicating, through the process of mechanical architectural drafting, a few select detailed residential section drawings, with each having different drafting scales.

### CARP 157 (3 credits) Floor, Wall, and Ceiling Framing
With a strong emphasis on platform framing, students will examine and demonstrate the proper methods of constructing subfloors, walls, and ceilings in the framework of residential and light commercial construction. This includes discussing the basic components and construction methods of light- gauge steel framing.

### CARP 161 (2 credits) Stair Construction and Remodeling
Students learn the different types of stairways and all parts pertaining to them. They also learn how to calculate, lay out, and construct stairway stringers with their proper landings, risers, treads, and railings.

### CARP 166 (3 credits) Roofing and Exterior Finishes
The different types of roof systems and all the material members that are involved in the different roof types are discussed. Students learn theoretically how to calculate rafters to fit their proper situations and practice laying out and cutting common and hip rafters. In addition, students are introduced to various exterior finishing with a focus on vinyl siding.

### CARP 178 (4 credits) Exterior and Interior Finishes
In this course, students will study and practice installing various types of exterior and interior finish material for residential construction. Exterior finish will include installation procedures for: roofing; siding; soffit; windows and doors; and aluminum trim. Interior finish will include techniques for: hanging drywall; installing prehung doors and door trim; applying trim around a window unit; and other common trim materials.

### RMDL 206 (3 credits) Remodeling Drafting and Design
This course covers the principles of drafting and design for remodeling purposes. Particular emphasis will be placed on documenting the existing structure where it meets the new construction, including kitchens, baths, utilities, and all mechanicals. Students will create sketches and working drawings that follow design constraints and a systematic renovation sequence.
*Prerequisite: CARP 182*

### RMDL 210 (2 credits) Demolition and Stabilization
This course covers the principles of proper techniques used for demolition and stabilizing structures during the remodeling process. It covers the safe use of tools and equipment and salvaging existing materials for reuse.
*Prerequisite: CARP 157*

### RMDL 216 (3 credits) Estimating and Scheduling
This course covers the principles of fundamental estimating and scheduling skills. Microsoft Excel® is used to establish estimating and scheduling procedures associated with a remodeling project. Cross-disciplinary estimating and inspection processes that will be necessary during the project are both addressed.
*Prerequisites: RMDL 111 and CIS 111*

## and Foundations II

Covers the details associated with site preparation and foundation inspections for a new building. Specifics are for lot size, set back, right of way, and building location. Work includes using various instruments for batter board installations, excavation of foundation, locating footer elevation, and forming

## RMDL 221 (2 credits) Remodeling Electro-Mechanical Systems

This course provides a general introduction to electro- mechanical systems in a residential structure and how to modify these systems during the renovation process. Students learn how to safely and properly re-rout basic electrical, plumbing, and HVAC ducts that are regularly encountered when remodeling a building. Emphasis is placed on when the scope of the work requires a sub-contractor to perform the work.

## RMDL 250 (2 credits) Installation and Weatherization

**This course covers the various types of products for reducing building heat loss by infiltration and conduction and the use of insulation used for noise and fire protection. Types of ventilation baffles, vapor barriers, infiltration barriers, and types of insulation are covered. Students perform installation of insulation materials for walls, ceilings, floors, and fire stop applications.**
*Prerequisites: CARP 177 and RMDL 220*

## RMDL 260 (3 credits) Kitchen and Bath Remodeling

This course covers the details and techniques used for residential remodeling and restoration of kitchens and baths. Students are exposed to a wide variety of products and the appropriate match for existing conditions. Emphasis is on the demolition of existing space and the acceptable design of the new space.
*Prerequisite: RMDL 250*

## RMDL 271 (4 credits) Advanced Interior Finishes

This course covers the details and applications of various interior painting and finishing and materials integrated to match renovation work with the existing building. The proper wood types and species, finishing methods, and applications are utilized. Details of interior pre-hung doors, window stools, extension jambs, and casing are covered. Students perform the installation of a complete custom interior trim package.
*Prerequisite: CARP 177*

## CARP 272 (2 credits) Site Work

# Water & Environmental Technology

## What is Water and Environmental Technology?

The Pennsylvania Department of Environmental Protection requires that operators of drinking water and wastewater treatment facilities are certified. Certification is obtained through a combination of exams and operating systems. The completion of an approved associate degree program significantly reduces the number of years of operating experience required for certification. Students in the Water and Environmental Technology program gain the knowledge, skills, and abilities necessary for successful completion of Department of Environmental Protection examinations.

Courses in the Water and Environmental Technology program are designed to meet the knowledge, skills, and ability requirements tested on the Pennsylvania Department of Environmental Protection certification exams. This will include courses covering topics such as water and wastewater treatment; water distribution and wastewater conveyance systems; geographical information systems (GIS); equipment maintenance; solids handling; basic electricity; plant administration; and rules and regulations.

## A Graduate of this Program will be able to:

- Describe the major processes, equipment, instrumentation, laws, and regulations associated with the collection and treatment of wastewater.
- Describe the major processes, equipment, instrumentation, laws, and regulations associated with the conveyance and treatment of potable water.
- Perform water and wastewater calculations involving flow, volume, surface area, disinfection, solids removal, retention time, and chemical feed rates.
- Analyze and improve operational procedures at water treatment and wastewater treatment facilities.
- Prepare, analyze, interpret, and report results of water and wastewater sample testing.
- Maintain a safe working environment as outlined by federal and state regulations.
- Describe the Safe Water Drinking Act and its implementation.
- Identify and describe the common diseases associated with water supply and sewage.
- Demonstrate the monitoring duties of water treatment operators.
- Describe the areas of safety to be considered in water treatment, storage, and laboratory testing.
- Describe the operation, components, and troubleshooting procedures for motors and electrical circuits.
- Determine and employ optimization strategies for water treatment and wastewater treatment processes and treatment facilities.

**Shannon Butler, Instructor**
B.A. Biology - Arcadia University
M.S. Pennsylvania State University
PA Certified Wastewater Operator

**Heath A. Edelman PE, Associate Professor**
B.S. Pennsylvania State University
M.S. University of New Haven
Licensed Professional Engineer
PA Certified Wastewater Operator
PA Certified Water Operator
Certified Hazardous Material Manager

**Model Schedule for**
**Water & Environmental Technology**

| | |
|---|---|
| **Semester 1** | |
| **WET 102: Laboratory Skills** | **1** |
| **WET 111: Drinking Water Distribution** | **3** |
| **WET 116: Water Resources** | **4** |
| **WET 156: Drinking Water I** | **4** |
| **MATH 137: Intermediate Algebra (or higher)** † | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 2** | |
| **WET 106: Wastewater Collection** | **3** |
| **WET 121: Safety, Health, and Security** | **2** |
| **WET 161: Wastewater I** | **4** |
| **WET 168: Utility Management & Administration** | **3** |
| **MATH 132: Elementary Geometry OR** | |
| **MATH 150: Elements of Statistics (or higher)*** | **3** |
| **CHEM 100 – Conceptual Chemistry** | **3** |
| **Semester 3** | |
| **WET 203: Stormwater Management** | **1** |
| **WET 206: Wastewater II*** | **5** |
| **WET 211: Print Reading/Geographical Information Systems (GIS)** | **3** |
| **WET 216: Industrial Waste*** | **3** |
| **BIO 210: General Biology I OR** | |
| **SCI 107 Environmental Sciences OR** | |
| **PHY 106 Physics for Everyday Life** | **3** |
| **CIS 111: Intro to Computer Applications** | **3** |
| **Semester 4** | |
| **WET 256: Drinking Water II*** | **4** |
| **WET 261: Advanced Wastewater and Solids Handling*** | **4** |
| **WET 268: Equipment & Systems O&M** | **4** |
| **ENG 216: Technical Writing OR** | |
| **ENG 221: Public Speaking*** | **3** |
| **Humanities Elective** | **3** |
| **Additional General Education Requirements** | |
| **Health and Physical Education Elective** | **1** |
| **TOTAL CREDITS** | **73** |

** Prerequisite or Co-requisite Required. See Course Description.*

*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 137 and MATH 132 (or MATH 150), must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements*

# Water and Environmental Technology (WET)

### WET 102 (1 credit) Laboratory Skills

In this course students will learn the basic math and laboratory skills needed to be successful as environmental professionals. Students will learn basic calculations, unit conversions, laboratory glassware, operation and maintenance of laboratory equipment, and basic laboratory testing used in the environmental field. Select lab methods will be utilized to provide students with a solid understanding of gravimetric, volumetric, and colorimetric methodologies. Basic chemical hygiene and chemical waste disposal will also be presented.

### WET 106 (3 credits) Wastewater Collection

Wastewater Collection will provide students with an introduction to the practical aspects of operating and maintaining wastewater collection systems, with a focus on the knowledge and skills operators need to identify collection system problems and select appropriate methods to solve them. Students will learn the components and typical layouts of collection systems, and be introduced to safety procedures for construction, inspection and testing of sewers, inspection of manholes, and underground construction and repair. Students will learn the basics of closed-circuit television inspections, clearing stoppages, cleaning sewers, and controlling roots, grease, odors, and corrosion in collection systems, and will learn to solve arithmetic problems relating to the operation and maintenance of wastewater collection systems.

### WET 111 (3 credits) Drinking Water Distribution

Students learn about the practical aspects of operating and maintaining water distribution systems, emphasizing safe practices and procedures, including the role and duties of water distribution system operators, procedures for operating and maintaining clear wells and storage tanks, and components and characteristics of distribution system facilities. The course covers the basics of operating and maintaining distribution systems, maintaining water quality in the system, disinfecting new and repaired facilities as well as water delivered to consumers. Techniques for recognizing hazards and developing safe procedures and programs is also taught.

### WET 116 (4 Credits) Water Resources

Water Resources will introduce students to topics such as the properties of water, water resources management, sources of water, management of stormwater, and water quantity and quality requirements. Students will develop an understanding of the characteristics surface water and groundwater sources, and will examine the impacts of urbanization on runoff. Students will discuss the relationship between the hydrological cycle and the treatment of water and wastewater. Students will gain hands on experience through laboratory exercises, case studies, and field trips, as appropriate.

### WET 121 (2 credits) Safety, Health, and Security

Water and Wastewater Safety, Health, and Security will provide students with an introduction to Safety, Health, and Security procedures to address the hazards and risks associated with operating and maintaining water and wastewater systems. Students will learn about industry accepted safety practices to provide the workforce a safe working environment. Identify and predict hazards in the work environment. Learn the proper use of personal protective equipment to mitigate the risks and hazards associated with operating and maintaining treatment plants, water distribution systems, and wastewater collection systems. Students will learn about the biological and chemical hazards associated with operating plants. Students will be introduced to security and emergency preparedness and the importance of coordinating activities with other agencies.

### WET 156 (4 credits) Drinking Water I

Drinking Water I provides students with an introduction to the equipment and processes used in the treatment of drinking water.The student will be introduced to different sources of water, reservoir management, and intake structures and will learn how to safely operate and maintain coagulation, flocculation, sedimentation, filtration, and disinfection processes. Topics such as the control of tastes and odors in drinking water, the Lead and Copper Rule, and solving arithmetic problems related to water treatment plant operations will also be covered. Students will be introduced to daily operating procedures, regulation of flows, chemical use and handling, records and reports, plant maintenance, safety and security, emergency conditions and procedures, handling complaints, and energy conservation.

### WET 161 (4 credits) Wastewater I

Wastewater I provides students with an introduction to the equipment and processes used in the treatment of wastewater. The student will be introduced to the different components of wastewater treatment facilities, including racks and screens, grit removal, sedimentation and floatation, trickling filters, rotating biological contactors, activated sludge, wastewater stabilization ponds, and disinfection. Topics such as why we treat wastewater, the duties of a wastewater treatment plant operator, and NPDES permits will also be introduced.

### WET 168 (3 credits) Utility Management & Administration

The Utility Management & Administration course will cover the major areas of responsibility of a utility manager, including legal requirements of federal legislation such as the Americans with Disabilities Act (ADA), the importance of developing policies and procedures for dealing with harassment, grievances, and violence in the workplace. Students will also discuss the financial management of a utility, including assessing the financial strength and stability of the utility, budgeting, and funding capital improvements. The course will also introduce students to Pennsylvania Department of Environmental Protection regulations governing water and wastewater treatment facilities, as well as federal, state, and local environmental regulations that pertain to construction and operation of drinking water, stormwater, and wastewater facilities.

### WET 203 (1 credit) Stormwater Management

The stormwater management course equips students with the knowledge and skills needed to address the complexities of stormwater management in Pennsylvania, integrating regulatory compliance, Best Management Practices (BMPs), soil and plant considerations, structural and non-structural approaches, and practical construction and inspection practices of BMPs. Through a combination of theoretical learning and practical applications, students will emerge with a holistic understanding of sustainable stormwater management practices tailored to the local context.

### WET 206 (5 credits) Wastewater II

Building upon the topics covered in WET 161, the course covers conventional and modified activated sludge processes, processes used for the removal of phosphorus and nitrogen, coagulation and filtration, and membrane bioreactors. Students will perform laboratory procedures and chemistry, analysis and presentation of data, and records and report writing. Operators also learn to analyze and solve operational problems and to perform mathematical calculations relating to wastewater treatment process control. A laboratory component will allow students to gain hands on experience.
*Prerequisite: WET 161 & MATH 137*

### WET 211 (3 credits) Print Reading/Geographical Information Systems (GIS)

This course introduces students to blueprint reading, geographical information systems (GIS), and the types of blueprints students may expect to encounter working in the water and wastewater industries. This includes land development prints and water and wastewater treatment facility prints. The GIS portion of the course introduces students to GIS mapping as it relates to municipal services.

### WET 216 (3 credits) Industrial Waste

Topics include the operation and maintenance of industrial wastewater treatment facilities, regulations governing industrial waste, types of industrial waste, operation and maintenance of flow measurement equipment, preliminary treatment processes, physical-chemical treatment processes, and physical treatment processes. Students are also introduced to the treatment of metal waste streams.
*Prerequisite: MATH 137*

### WET 256 (4 credits) Drinking Water II

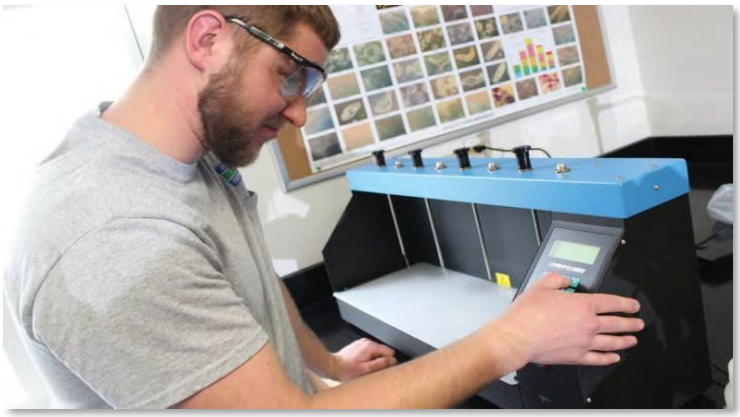
The Drinking Water II course will introduce operators to the practical aspects of operating and maintaining water treatment plants. Topics covered will include drinking water regulations (including the safe drinking water act), iron and manganese control, fluoridation, softening, disinfection by-products, emerging contaminants, nitrate and arsenic removal, corrosion control, handling and disposal of process wastes, maintenance, instrumentation, and advanced laboratory procedures. A laboratory component will allow students to gain hands on experience.
*Prerequisite: WET 156*

### WET 261 (4 credits) Advanced Wastewater and Solids Handling

Advanced Wastewater and Solids Handling builds upon the material covered in Wastewater I and Wastewater II. Students will discuss the equipment and advanced treatment processes used for odor control and residuals solids management. Solids stabilization methods such as anaerobic and aerobic digestion and chemical stabilization will be covered. Additional topics such as sludge types, characteristics, and calculating sludge quantities are covered. Sludge thickening using gravity thickeners, dissolved air flotation units, centrifuges; as well as sludge conditioning such as thermal, wet oxidation, and elutriation are explored. Dewatering with pressure filtration (plate and frame, belt, vacuum), centrifuges and drying beds; and volume reduction using composting, mechanical drying, and incineration will be covered. Disposal methods for dewatered or liquid stabilized sludge, and applicable regulations for beneficial use and land application of biosolids are additional topics. Wastewater reuse, recycling, and reclamation are also explored.

### WET 268 (4 credits) Equipment & Systems O&M

The Equipment & Systems O&M course will provide students with an introduction to the operation and maintenance of water and wastewater treatment facilities. Electrical and hydraulic concepts will be applied to water industry equipment. Typical maintenance procedures for pumps, blowers and compressors, valves, gauges and thermometers, and alarms will be covered. Motor control systems for pumps and blowers will be covered. Students will be introduced to maintenance programs and asset management. Topics such as preventive maintenance, emergency repairs, and scheduled repairs will be covered. Students will be given the opportunity to learn maintenance procedures in a laboratory setting. This will include developing some basic mechanical, electrical, and plumbing skills.



# Welding Technology

## What is Welding Technology?

The Welding Technology program provides the opportunity to develop the skills necessary to be a skilled entry-level welder in the welding industry. There is an increasing demand for welders in a variety of industries including light and heavy construction, automobile, aircraft, gas and oil, railroad, machinery and manufacturing industries. These skills are developed through theory and hands-on application into various welding specialties including blueprint reading and advanced computer-aided design; oxy-fuel welding and related processes; basic shielded metal arc welding; basic gas metal arc welding; and basic gas tungsten arc welding.

Students find employment in a wealth of industries related to construction, machinery, manufacturing oil and gas, and transportation industries. Graduates with entry-level certifications will find challenging jobs with the opportunity for rapid advancement.

## A Graduate of this Program will be able to:

- Interpret welding blueprints
- Cut and Weld carbon steel using the Oxy-Fuel torch
- Weld carbon steel with the shielded metal arc welding process
- Weld carbon steel, aluminum and stainless steel with the gas metal arc welding process
- Weld carbon steel, aluminum and stainless steel with the gas tungsten arc welding process

**Andrea Biesecker, Instructor**
AAS: Thaddeus Stevens College of Technology
BS: Eastern Mennonite University

**Michael Marino, Instructor**
AAS: Thaddeus Stevens College of Technology
BS: Eastern Mennonite University

**Joshua Seitzer, Instructor**
BA: Eastern University
M.ED: Pennsylvania State University

**Jeffery Swoyer, Instructor**
BS.Ed: Temple University

**Model Schedule for Welding Technology**

| | |
|---|---|
| **Semester 1** | |
| WELD 106: Welding Blueprint Reading | 4 |
| WELD 110: Oxy-Fuel Welding and Related Processes | 3 |
| WELD 121: Shielded Metal Arc Welding I | 4 |
| WELD 150: Introduction to Safety | 1 |
| MATH 126: Technical Math I (or higher) †^ | 3 |
| Science: Elective | 3 |
| **Semester 2** | |
| WELD 155: Gas Metal Arc Welding I | 3 |
| WELD 160: Gas Metal Arc Welding II | 3 |
| WELD 165: Gas Tungsten Arc Welding I | 3 |
| WELD 170: Gas Tungsten Arc Welding II* | 3 |
| MATH 136: Technical Math II (or higher)* | 3 |
| ENG 106: English Composition | 3 |
| **Semester 3** | |
| WELD 205: Flux-Cored and Submerged Arc Welding* | 3 |
| WELD 220: Shielded Metal Arc Welding II* | 3 |
| WELD 225: Metallurgy | 3 |
| WELD 230: Special Welding Processes* | 3 |
| Humanities Elective | 3 |
| Health and Physical Education Elective | 1 |
| ENG 216: Technical Report Writing* | 3 |
| **Semester 4** | |
| WELD 260: Gas Metal Arc Welding III* | 3 |
| WELD 270: Gas Tungsten Arc Welding III* | 3 |
| WELD 275: Pipe Welding* | 3 |
| WELD 280: Non-Destructive Testing* | 3 |
| CIS 105: Drawing with Auto Cad | 3 |
| General Studies Elective | 3 |
| **TOTAL CREDITS** | **73** |

*** Prerequisite or Co-requisite Required. See Course Description.**
**†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 136, must take an additional Gen-Ed elective in order to meet their Gen-Ed requirements.**
**^ Minimum Grade Required. See Course Description.**

# Welding Technology (WELD)

### WELD 106 (4 credits) Welding Blueprint Reading
A study of industrial blueprints. Emphasis on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Interpretation of plans and drawings used by industry.

### WELD 110 (3 credits) Oxy-Fuel Welding and Related Processes
Provides a course that covers the oxygen-acetylene welding/cutting process. Topic includes the assembly and disassembly of an oxy-fuel torch setup, the correct settings required to flame-cut carbon steel as well as a basic introduction to the oxyfuel welding process. Safety around using an oxy-fuel torch is covered extensively to ensure the safe operation of the process. Plasma Arc Cutting (PAC) is reviewed as modern alternative to using oxyfuel to cut carbon steel. The safe and correct operation of the process is covered.

### WELD 121 (4 credits) Shielded Metal Arc Welding 1
This course develops skills in shielded metal arc welding. Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 150 (1 credit) Introduction to Safety
This course provides the fundamentals of safety in conducting welding operations and provides safety training using Organization Safety Health Administration (OSHA) standards that apply to the programs of study at Thaddeus Stevens College of Technology. The training received covers all topic areas required by the OSHA Outreach Training Program for industry recognized ten hour certification in General Industry Safety.

### WELD 155 (3 credits) Gas Metal Arc Welding
This course develops skills in gas metal arc welding (GMAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 160 (3 credits) Gas Metal Arc Welding 2
This course further develops skills in gas metal arc welding (GMAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.
*Prerequisite WELD 155*

### WELD 165 (3 credits) Gas Tungsten Arc Welding
The course develops skills in gas tungsten arc welding (GTAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 170 (3 credits) Gas Tungsten Arc Welding 2
The course develops skills in gas tungsten arc welding (GTAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided in advanced skills.
*Prerequisite WELD 165*

### WELD 205 (3 credits) Flux-Cored and Submerged Arc Welding
This course is an advanced welding application and examines safety, set-up, wire identification, current, shielding gases, operations and troubleshooting techniques of the process. Significant hands-on application designed to provide training in advancement of welding skills using the FCAW and SAW on carbon steels using small and large diameter flux-cored electrodes in all positions on fillet and groove welds.
*Prerequisites: WELD 155 and WELD 160*

### WELD 220 (3 credits) Shielded Metal Arc Welding 2
This course is an advanced welding application and examines safety, current selection, electrode identification, welding methods, operations, and troubleshooting techniques of the process. Significant hands-on application designed to provide training in advancement of welding skills on carbon and stainless steels using various electrodes in all positions on fillet and groove welds.
*Prerequisite: WELD 121*

### WELD 225 (3 credits) Metallurgy
This course develops the understanding of physical characteristics and mechanical properties of metals for welding application. This course is designed to provide training in identifying base metals and selection of weld filler metals and understand how welding heat affects base metals during the welding process.

### WELD 230 (3 credits) Special Welding Processes
Significant hands-on application designed to provide training in advancement of welding skills using the submerged arc welding (SAW), stud welding, and tube welding processes on carbon and stainless steels using specialized equipment in various positions.
*Prerequisites: WELD 155 and WELD 165*

## WELD 260 (3 credits) Gas Metal Arc Welding 3

This course is an advanced welding application and examines safety, set-up, wire identification, current, shielding gases, operations and troubleshooting techniques of the process. Significant hands-on application designed to provide training in development of welding skills on aluminum, carbon and stainless steels on all positions on fillet and groove welds.
*Prerequisites: WELD 155 and WELD 160*

## WELD 270 (3 credits) Gas Tungsten Arc Welding 3

This course is an advanced welding application, set-up, welding rod identification, current, polarity and high frequency, shielding gases, operations and troubleshooting techniques of the process. Significant hands-on application designed to provide training in advancement of welding skills on aluminum, carbon and stainless steels using various filler metals in all positions on fillet and groove welds.
*Prerequisites: WELD 165 and WELD 170*

## WELD 275 (3 credits) Pipe Welding

This course develops pipe welding application, preparation and set-up, current, shielding gases, welding techniques and quality inspection of the welds. Significant hands-on application designed to provide training in development of pipe welding skills on carbon steel pipe using various welding processes in all positions on groove welds.
*Prerequisites: WELD 121 and WELD 220*

## WELD 280 (3 credits) Non-Destructive Testing

This course introduces the welder to non-destructive examination methods to determine the physical properties of a weld and to predict the service life of a weld. Students will learn to differentiate between destructive and non-destructive testing methods to identify discontinuities and defects in welds by using various non-destructive testing equipment to various specifications and codes.
*Prerequisite: WELD 106*

# Technical Studies-Journeyworker

In response to requests for academic recognition of registered apprenticeship training, Thaddeus Stevens College of Technology (TSCT) provides a technical studies–machining technology associate of applied science (AAS) degree. This degree recognizes the goals, general principles, and procedures of registered apprenticeship training. The technical studies–machining technology AAS degree is designed to support lifelong learning and accelerate the achievement of individual career goals. Transferability of the technical studies portion of the AAS degree to four-year institutions will be based on the policies of the accepting institution.

PROGRAM REQUIREMENTS:

V For admission, students must possess a PA Apprenticeship Completion Certificate issued by the Pennsylvania Department of Labor and Industry.

W Students must complete all prescribed apprentice-related technical instruction.

GRADUATION REQUIREMENTS:

X 70 credit hours

Y 46 credits technical studies (awarded as advanced standing)

Z 24 credits general studies required from the following subject areas:
- English (ENG)
- Mathematics (MATH)
- Science (includes PHYS, BIO, etc.)
- Humanities (includes all SOC, ECON, HIST)

Twenty-five percent of the total program credits must be completed at Thaddeus Stevens College.

# **Certificate** Programs

# Electrical Construction & Maintenance Certificate

## What is the Construction Electrician Certificate?

The Construction Electrician certificate program provides students with the opportunity to acquire the theory and skills needed to gain employment as residential, commercial, and industrial construction electricians. Skills are developed through basic electrical theory and practical work project assignments. This program will give students a broad theoretical and practical background in all aspects of electrical construction.

Graduates of the Construction Electrician program are prepared to find employment as residential, commercial, and industrial construction electricians. Because of the continual growth in building construction, there are many employment possibilities.

## A Graduate of this Program will be able to:

- Demonstrate appropriate technical skills in the electrical construction field.
- Demonstrate the ability to design, develop, and troubleshoot residential, commercial, and industrial circuitry.
- Complete parts list and order forms that demonstrate knowledge of coding and numbering systems for devices, hardware, and electrical equipment.
- Interpret, develop, and utilize blueprints, schematic diagrams, and wiring plans to perform electrical construction activities.
- Demonstrate the ability to apply OSHA-accepted safety standards as appropriate.
- Demonstrate knowledge of National Electrical Codes that apply to specific occupancies.
- Demonstrate knowledge of test equipment used in troubleshooting and repair of circuits, distribution systems, and electrical equipment.

**Michael Dailey, Instructor**
Electrical Apprenticeship: IBEW Local Union 743
IBEW Local Union 743 Apprenticeship Instructor
Certified Journeyman Electrician
Medium Voltage Splice and Termination Certification

**Evan Ducko, Instructor**
AA: Bucks County Community College
PDE C&T Instructional I Electrical Occupations
Electrical Apprenticeship: BCTHS
C-TECH: Fiber Optic/Copper-Based Systems
Network Cabling Specialist

**Model Schedule for Construction Electrician**

| | |
|---|---|
| **Semester 1** | |
| **ECM 106: AC-DC Fundamentals** | **5** |
| **ECM 111: Residential Wiring** | **5** |
| **ECM 116: Electrical Construction Safety** | **2** |
| **ENG 106: Composition I** | **3** |
| **MATH 126: Technical Math I (or higher)** | **3** |
| **Semester 2** | |
| ***ECM 156: Commercial/Industrial Wiring** | **5** |
| **ECM 162: National Electrical Code** | **4** |
| **ECM 166: Blueprint Reading: Electrical** | **3** |
| **Elective : General Studies Elective** | **3** |
| **Elective : General Studies Elective** | **3** |
| **TOTAL CREDITS** | **36** |

** Prerequisite or Co-requisite Required. See Course Description.*

### ECM 106 (5 credits) AC/DC Fundamentals
This course presents basic principles, laws, and formulas which relate to alternating (AC) and direct current (DC) circuit applications in electricity. Topics include electron theory, Ohm's Law, series, parallel and combination circuit theory. In addition, capacitive and inductive reactive circuitry (RE, RC, RLC) are discussed.

### ECM 111 (5 credits) Residential Wiring
This course is an introduction to residential wiring practices and techniques. Topics cover basic residential symbols, blueprint reading, wire diagramming, and the use of applicable National Electrical Codes (NEC). Lab work and projects enable students to develop an understanding of basic residential circuits.

### ECM 116 (2 credits) Electrical Construction Safety
This course presents Occupational Safety and Health Administration (OSHA) general safety requirements for specific electrical and construction environments. Topics include ladders, scaffolds, lockout and tagging, personal protective equipment (PPE), temporary wiring, harness techniques, and confined spaces.

### ECM 156 (5 credits) Commercial and Industrial Wiring
Basic theory and laboratory assignments in safety, wiring practices, blueprint reading, and the National Electrical Code (NEC) as it applies to commercial and industrial wiring techniques. Labs enable students to gain practical experience installing and troubleshooting single- and three-phase distribution, transformers, motors, and motor control circuits.
*Prerequisite: ECM 111*

### ECM 162 (4 credits) National Electrical Code
The student will locate, analyze and interpret National Electrical Code (NEC) tables and codes to determine appropriate distribution equipment, conduit and conductor sizes, overcurrent protection, load demands and branch circuit requirements for residential, commercial and industrial facilities.

### ECM 166 (3 credits) Blueprint Reading: Electrical
This course is an introduction to basic blueprint reading skills and techniques. Topics cover lines and symbols, pictorial and orthographic diagrams, specifications, scales, prints, and plans. Classwork enables students to develop a basic understanding of construction drawings.

# Computer Integrated Machining Certificate

## What is the General Machine Certificate?

The General Machine certificate program offers a broad training experience that prepares individuals for entry-level employment in the machining industry. Through a combination of classroom study and assigned lab activities, students acquire essential background information, develop trade skills, and become familiar with production methods and standards common to the industry. Within the lab setting, emphasis is on the practical application of skills. Students will learn to operate a variety of conventional machine tools and computer numerical control (CNC) machines, interpret industrial drawings/blueprints, and use precision measuring and inspection instruments.

Students enrolled in the certificate program may enroll in the associate degree program upon completion of the certificate program. Graduates of the General Machine certificate program are employed as machine operators, machinists, CNC operators, and quality control inspectors.

## A Graduate of this Program will be able to:

- Demonstrate safe work habits and be conscious of safety when working with machinery.
- Read blueprints, interpret drawings, understand specifications, and establish tolerances.
- Apply mathematics in machine tool technology (speeds, feeds, thread measurement, sine bar, etc.)
- Operate basic machine tools and demonstrate knowledge of their construction in relation to the metal industry.
- Operate abrasive cutting machinery; select and plan machining operations on this equipment.
- Demonstrate skills in quality control, inspection, gauging methods, and production control as they relate to manufacturing design and production.

**Kyle Young, Instructor**
AAS: Thaddeus Stevens College of Technology

**Model Schedule for**
**Computer Integrated Machining Certificate**

| | |
|---|---|
| **Semester 1** | |
| **CIM 106: Blueprint Reading and Related Math** | **3** |
| **CIM 110: Manufacturing Processes** | **2** |
| **CIM 115: Measurement Systems** | **2** |
| **CIM 118: Lathe and Vertical Milling Machine I** | **4** |
| **CIM 161: Metallurgy** | **2** |
| **MATH 137: Intermediate Algebra (or higher)** | **3** |
| **CIS 105 Drawing with AutoCAD** | **3** |
| **Semester 2** | |
| ***CIM 158: Lathe and Vertical Milling Machine II** | **3** |
| ***CIM 166: Manufacturing Processes II** | **2** |
| ***CIM 176: Computer Numerical Control I** | **4** |
| ***CIM 222: CAD/CAM I** | **3** |
| ***MATH 141: Trigonometry (or higher)** | **3** |
| **ENG 106: English Composition** | **3** |
| **TOTAL CREDITS** | **37** |

** Prerequisite or Co-requisite Required. See Course Description.*

### CIM 106 (3 credits) Blueprint Reading and Related Math
This course will introduce the student to industrial drawings, basic sketching, and applied mathematics. Interpretation of title blocks, orthographic projection, dimensioning and tolerancing, assemblies, and the elementary application of Geometric Dimensioning & Tolerancing (GD&T) will be covered throughout this course. The skills and knowledge obtained through CIM 106 will prepare the student for application in the machine lab to manufacture machined components.

### CIM 110 (2 credits) Manufacturing Processes
Students will learn laboratory safety and material handling. The physics of metal cutting, and the machinability of metals are introduced. Semi-precision and precision measuring instruments are introduced and practiced. Precision layout, bench grinding, surface grinding and power sawing operations will also be introduced and exercised.

### CIM 115 (2 credits) Measurement Systems
This course will introduce the student to basic metrology including precision layout. The use of indirect and direct measurement instruments including micrometers, calipers, indicators, and various gages will be utilized. Blueprint reading skills, including elementary GD&T, will be necessary for completion of this course.

### CIM 118 (4 credits) Lathe and Vertical Milling Machining I
This course will introduce the student to procedures used on the vertical milling machine and lathe. Course content will include a wide variety of operations including, milling, turning, facing, drilling, reaming, tapping, and calculations related to set up.
*Corequisite: CIM 106*

### CIM 158 (3 credits) Lathe and Vertical Milling Machining II
This course will introduce the student to advanced techniques and procedures used on the vertical milling machine and lathe. Course content will include offset boring, cutting slots and pockets, taper turning, and thread cutting. An emphasis on workholding will be integrated into this course.
*Prerequisites: CIM 106, CIM 110, CIM 115, CIM 118 and MATH 137*

### CIM 161 (2 credits) Metallurgy
This course covers the basic principles related to metallurgy. Many industrial processes are clarified as the student gains an understanding of quenching, annealing, case hardening, tempering, and crystallization. In addition, students will see how these changes occur through heat treating projects in the lab. Students will also experience real world applications through industry visits.

### CIM 166 (3 credits) Manufacturing Processes II
This is a lab intensive course which provides students with extensive hands-on training. Assigned projects aid students in gaining critical experience contributing to a well-rounded machining education.
*Prerequisites: CIM 106, CIM 110, CIM 115, CIM 118, CIM 161 and MATH 137*

### CIM 176 (3 credits) Computer Numerical Control (CNC) I
CIM 176 introduces the student to basic CNC concepts such as word-address programming, machine set-up, and program proofing. This course serves as an introduction to CNC machines and CNC programming methods and techniques.
*Prerequisites: CIM 106, CIM 110, CIM 118 and MATH 137*

### CIM 222 (3 credits) CAD/CAM I
This course introduces the use of Computer Aided Drafting & Computer Aided Manufacturing (CAD/CAM) as a tool for defining part geometry and generating Computer Numerical Control (CNC) machine code. Two-axis and three-axis applications are demonstrated, along with the use of the CAD/CAM applications.
*Prerequisites: CIM 106, CIM 110, CIM 115, and MATH 137*

# Masonry Construction Certificate

## What is the Masonry Construction Certificate?

The Masonry Construction certificate provides the opportunity to develop the basic skills of a mason and is designed as an introduction to the trade. Students will focus on basic tool skills, trade materials, safety procedures and terminology. Emphasis is placed on brick and block skill sets. These skills are developed through hands-on projects, which are preceded by theory lectures and demonstrations. Special emphasis is placed on the appreciation of the beauty and permanence of brickwork and on the development of pride in workmanship.

Students successfully completing the Masonry Construction certificate program find employment in the field as mason tenders and masons with experience and further education as forepersons or superintendents. Many masons are self-employed.

All students completing the certificate program may enroll in the associate degree program.

## A Graduate of this Program will be able to:

- Operate masonry tools and equipment safely and effectively.
- Use masonry terminology.
- Read blueprints to estimate materials quantity and pricing.
- Lay out and construct footings.
- Lay out and build a block foundation.
- Apply brick veneering to a structure.
- Construct a masonry arch.

**Michael T. Gardner, Instructor**
AAS: Thaddeus Stevens College of Technology

## Model Schedule for Masonry Construction

| | |
|---|---|
| **Semester 1** | |
| MASN 101: Intro to Tools, Safety, and Equipment | 3 |
| MASN 105: Introduction to Masonry Construction | 3 |
| MASN 110: Development of Masonry Materials | 3 |
| MASN 116: Chimney Construction | 3 |
| MATH 126: Technical Math I (or higher) | 3 |
| **Semester 2** | |
| MASN 155: Block Construction, Bearings & Anchoring Systems | 4 |
| MASN 158: Adhered Concrete Masonry Veneer | 2 |
| MASN 162: Masonry Hardscaping Patios & Retaining Walls | 2 |
| MASN 167: Masonry Restoration & Building Maintenance | 3 |
| MASM 171: Concrete Sidewalks | 1 |
| ENG 106: English Composition | 3 |
| Health and Physical Education Elective | 1 |

MASN 101 (3 credits)
Introduction to Tools, Safety and Equipment Students will be introduced to the tools required for the masonry trade, understand safety standards and practices, and receive training and certifications on various equipment used on a job site.

MASN 105 (3 credits)
Introduction to Masonry Construction
This course will teach the fundamentals of the masonry trade. This will include spreading mortar and striking full joints, laying brick and block to the line, bonding the length and height of a wall, building leads, and hanging a corner pole.

MASN 110 (3 credits)
Development of Masonry Materials
History and the manufacturing of masonry materials. In the manufacturing of materials, there are many different types of brick and block. Students will learn the various names and where the material should be used in a wall. Portland cement comes in different forms and how to properly mix the different types. Students will learn what the different strengths of cement and where they should be used.

MASN 116 (3 credits) Chimney
Construction
Students will understand the difference between and be able to construct properly a single and double flue chimney.

MASN 155 (4 credits)
Block Construction, Bearings, and Anchoring Systems
Students will learn terminology; the placement of anchor bolts, bearing plates, setting lintels, cutting in electrical boxes and door ties. They will be working around conduit, duct work and rebar reinforcement. They will also build a composite wall using block and brick.

MASN 158 (2 credits)
Adhered Concrete Masonry Veneer
Students will learn to use the tools and equipment for installing veneer stone; to apply hanging wire, scratch coat, flashings, vapor barriers, and drain mats; to hang stone; and to point the mortar joints. Students will learn the different types of patterns stone can be laid in.

MASN 162 (2 credits)
Masonry Hardscaping Patios & Retaining Walls The proper use of masonry products in an outdoor environment. Understand the process to build an outdoor patio and retaining walls using masonry materials.

MASN 167 (3 credits)
Restoration and Building Maintenance
Cover the various materials that go along with masonry products. These would be caulking, waterproofing, patching, repointing, cutting out and repairing damaged areas, and cleaning of masonry. This course will focus on preventive maintenance to stop any further damage of the masonry structure.

MASN 171 (1 credit) Concrete
Sidewalks
Students will learn how to build forms and how to place concrete for a sidewalk.

# Welding Technology Certificate

## What is the Welding Technology Certificate?

The Welding Technology certificate program provides the opportunity to develop skills necessary to be skilled entry- level welders in the welding industry. There is an increasing demand for welders in a variety of industries including light and heavy construction, automobile, aircraft, gas and oil, railroad, machinery and manufacturing industries. These skills are developed through theory and hands-on application Into various welding specialties including blueprint reading and advanced computer-aided design, oxy-fuel welding and related processes, basic shielded metal arc welding, basic gas metal arc welding, and basic gas tungsten arc welding.

Students find employment in a wealth of industries related to construction, machinery, manufacturing oil and gas, and transportation industries. Graduates with entry-level certifications will find challenging jobs with opportunity for rapid advancement.

## A Graduate of this Program will be able to:

- Interpret welding blueprints
- Cut and Weld carbon steel using the Oxy-Fuel torch
- Weld carbon steel with the shielded metal arc welding process
- Weld carbon steel, aluminum and stainless steel with the gas metal arc welding process
- Weld carbon steel, aluminum and stainless steel with the gas tungsten arc welding process

**Andrea Biesecker, Instructor**
AAS: Thaddeus Stevens College of Technology
BS: Eastern Mennonite University

**Michael Marino, Instructor**
AAS: Thaddeus Stevens College of Technology
BS: Eastern Mennonite University

**Model Schedule for Welding Technology Certificate Program**

| | |
|---|---|
| **Semester 1** | |
| **WELD 106: Welding Blueprint Reading** | **4** |
| **WELD 110: Oxy-Fuel Welding and Related Processes** | **3** |
| **WELD 121: Shielded Metal Arc Welding I** | **4** |
| **WELD 150: Introduction to Safety** | **1** |
| **†^MATH 126: Technical Math I (or higher)** | **3** |
| **ENG 106: English Composition** | **3** |
| **Semester 2** | |
| **WELD 155: Gas Metal Arc Welding I** | **3** |
| ***WELD 160: Gas Metal Arc Welding II** | **3** |
| **WELD 165: Gas Tungsten Arc Welding I** | **3** |
| ***WELD 170: Gas Tungsten Arc Welding II** | **3** |
| ***MATH 136: Technical Math II (or higher)** | **3** |
| ***ENG 216: Technical Report Writing** | **3** |
| **TOTAL CREDITS** | **33** |

** Prerequisite or Co-requisite Required. See Course Description.*

*†Any Student who has taken pre-calculus (MATH 207) or calculus (MATH 213) instead of MATH 126 and MATH 136, must take an additional Gen-Ed elective to meet their Gen-Ed requirements.*

### WELD 106 (4 credits) Welding Blueprint Reading
A study of industrial blueprints. Emphasis on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Interpretation of plans and drawings used by industry.

### WELD 110 (3 credits) Oxy-Fuel Welding and Related Processes
Provides a course that covers the oxygen-acetylene welding/cutting process. Topic includes the assembly and disassembly of an oxy-fuel torch setup, the correct settings required to flame-cut carbon steel as well as a basic introduction to the oxyfuel welding process. Safety around using an oxy-fuel torch is covered extensively to ensure the safe operation of the process. Plasma Arc Cutting (PAC) is reviewed as modern alternative to using oxyfuel to cut carbon steel. The safe and correct operation of the process is covered.

### WELD 121 (4 credits) Shielded Metal Arc Welding 1
This course develops skills in shielded metal arc welding. Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 150 (1 credit) Introduction to Safety
This course provides the fundamentals of safety in conducting welding operations and provides safety training using Organization Safety Health Administration (OSHA) standards that apply to the programs of study at Thaddeus Stevens College of Technology. The training received covers all topic areas required by the OSHA Outreach Training Program for industry recognized ten hour certification in General Industry Safety.

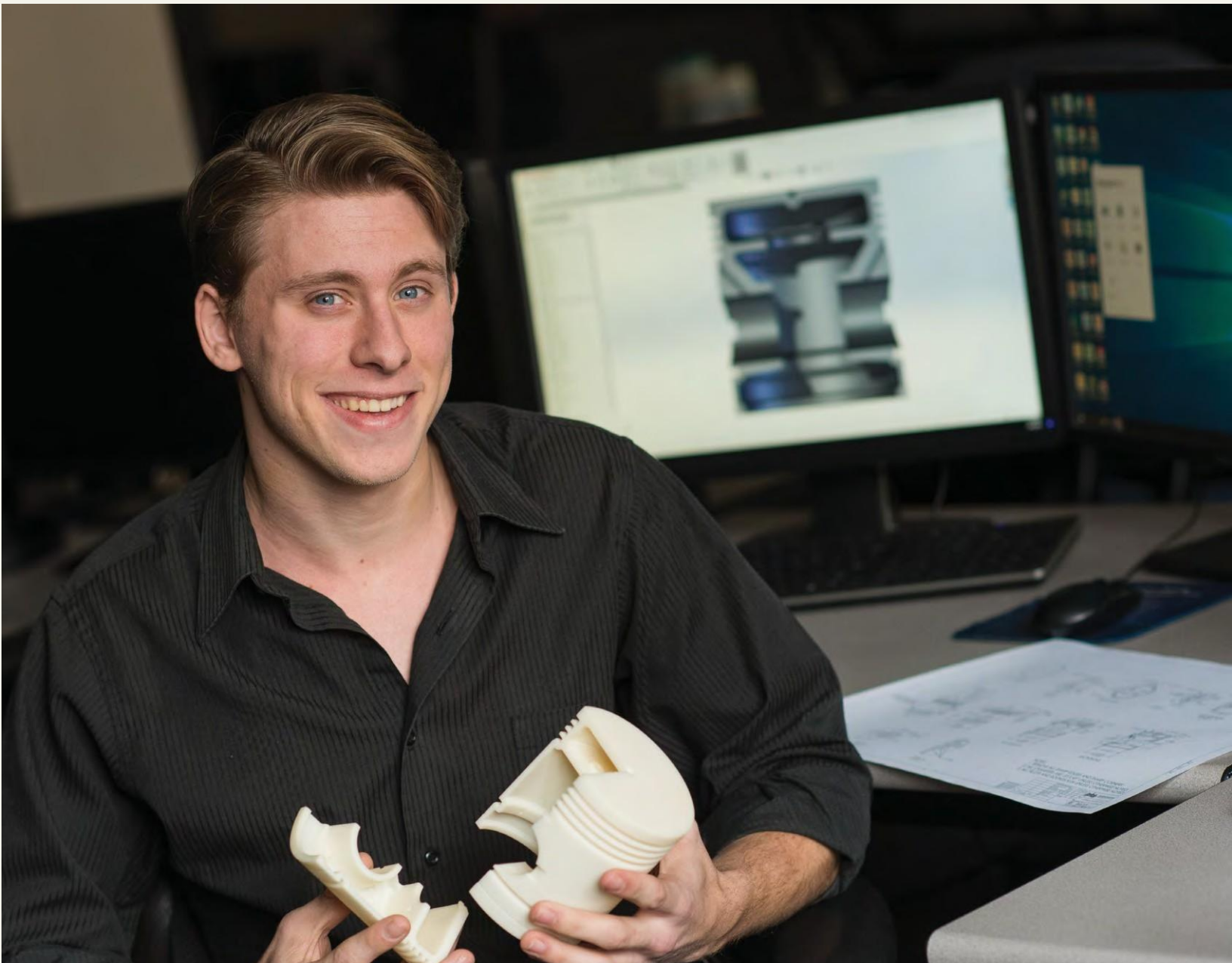
### WELD 155 (3 credits) Gas Metal Arc Welding
This course develops skills in gas metal arc welding (GMAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 160 (3 credits) Gas Metal Arc Welding 2
This course further develops skills in gas metal arc welding (GMAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.
*Prerequisite WELD 155*

### WELD 165 (3 credits) Gas Tungsten Arc Welding
The course develops skills in gas tungsten arc welding (GTAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided.

### WELD 170 (3 credits) Gas Tungsten Arc Welding 2
The course develops skills in gas tungsten arc welding (GTAW). Students will learn applications, set-ups, operations, and troubleshooting of these processes. Significant hands-on practice is provided in advanced skills.
*Prerequisite WELD 165*

# General Education



# General Education Core Curriculum

General education courses are required for all majors at Thaddeus Stevens College. These courses not only support academic work within the major but also enhance employment skills and help prepare students for active, successful lives as citizens.

Students are required to successfully complete 25 general education credits for graduation. These courses include the liberal arts and science core, as well as general education applied courses.

General education courses may be offered in-person, online (either synchronous or asynchronous), or in a hybrid format.

- **Liberal Arts and Science Core**
  These courses emphasize theoretical concepts, critical and analytical thinking skills, and both numerical and verbal literacy. Students must successfully complete at least 18 credits from the liberal arts and science core. These 18 credits must include one course from each of the following four core areas:
  - Mathematics (MATH)
  - English (ENG)
  - Science (includes PHYS, CHEM, SCI, BIO)
  - Humanities and Social Sciences (includes ECON, HIST, SOC, PSY, some ENG)
    *NOTE: (HSS) denotes course fulfills Humanities/Social Sciences requirement or may be used as a General Education elective.*
- **General Education Applied Courses**
  General Education courses focus on the practical application of skills. They are broad in scope (non-major specific) and are designed to support employability, academic achievement, and personal development. These courses are taught in person, online (synchronous or asynchronous), or in hybrid format. Students may apply up to seven (7) credits of general education applied courses toward their graduation requirements. Courses in this category include:
  - Business (BUSN)
  - Computer Information Systems (CIS)
  - Health and Physical Education (HEAL)
  - Any student who takes Pre-Calculus (MATH 207) or Calculus (MATH 213) instead of the two required math courses in their program must take an additional three (3) credit general education elective to meet their requirements.
  - General education courses are available in-person, online (synchronous or asynchronous), or in a hybrid format

# Computer Information Systems Courses

**Tara Faro, Instructor**
MS: The Pennsylvania State University BS: West Chester University

### CIS 105 (3 credits)* Drawing with AutoCAD®

Provides an introduction to the use of computer software used to draw. Students learn introductory AutoCAD® commands used to create basic geometric shapes and editing functions used to modify geometry. Measuring and distance specifications for objects is taught along with text creation for use in notes and specifications. Students also learn to use image transfer software that converts pictures and images into line geometry.
**ARCH and MET students may not take this course without consent of their respective program faculty members. ECAD students may also NOT take.*

### CIS 111 (3 credits)* Introduction to Computer Applications

Introduction to applications for use in the professional and college environment. Students obtain skills in the latest business software. Activities consist of hands-on exercises using the operating system, word processing, spreadsheet, database management, and presentation programs.
**BUAD students may not take. PreMajor students may not take until the completion of DSOC 010 & DSOC 011.*

### CIS 211 (3 credits)* Microsoft Excel

This is a comprehensive course in Excel®. It contains everything from basic introductory material to complex business formulas and mapping procedures. Students upon completion will be prepared to take the Microsoft Office User Specialist (MOUS) exam for Excel® certification. *BUAD students may not take.*

# English and Humanities Courses

**Marla Bucy, Associate Professor**
MA: Temple University
BS: Millersville University

**Dr. Sarah D'Stair, Assistant Professor**
PhD: University of Massachusetts MA: San Jose State University B.A: San Jose State University

**Laura Malone, Instructor**
Adv. Cert Post Masters: SBL, SDL: Hunter College, C.U.N.Y.
MS: Pace University
BA: University of Richmond

**Patricia Meley, Instructor**
MA: The Pennsylvania State University
BA: Lynchburg College

**Lisa-Marie Middendorf EdD, Assistant Professor**
EdD: University of Pennsylvania MA: SUNY Brockport
BS: St. John Fisher College

**Melissa Weathers, Instructor**
MS: Lincoln University
BS: West Chester University

### ENG 100 (1 credit) English Composition Workshop

This 1hr, once weekly workshop aims to compliment and provide a work space for English 106 Composition I. Students who have passed DENG 099 with a C grade (73%) or higher are required to enroll in ENG 100: English Composition Workshop the same semester they are enrolled in English 106. Students will engage in one-on-writing writing tutorials, writing workshops, peer reviews and whole-class writing, grammar, and citation instruction. The work flow will mirror the assignments required in English 106 Composition I.
*Prerequisite: DENG 099 with a grade of C or better*
*Corequisite: ENG 106*

### ENG 106 (3 credits) English Composition I

This course teaches students to write well-crafted texts through engagement in the drafting and revision process. The course also covers skills for writing effective, precise, and grammatically correct prose. Students also learn to think critically about texts and other media they encounter. **Corequisite: ENG 100 for any student who passed DENG 099.*

### ENG 116 (3 credits)* Short Story and Poetry (HSS)

Analysis of a variety of short stories and poems with an emphasis on developing interpretive skills. Special attention given to individual presentations and class discussion. technique, symbolism, irony, style, and social significance.
**Prerequisite: ENG 106 with a minimum grade of "C" or instructor permission*

### ENG 206 (3 credits)* Reading and Writing Creative Nonfiction (HSS)

This course is an introduction to the genre of Creative Nonfiction and includes a variety of approaches to the genre, both in content and form. Specific content approaches include food writing, travel writing, sports writing, music writing, environmental/place writing, pop culture writing, and immersive journalism. Specific form approaches include vignette, freeform, podcast, blog form, among other non-traditional forms. Students are introduced to these approaches through various shared texts, and students practice these approaches through difference writing activities and assignments. *Prerequisite: ENG 106 with a minimum grade of "C" or better *instructor permission.*
*(HSS) denotes course fulfills Humanities/Social Sciences requirement or may be used as a General Education elective*

### ENG 216 (3 credits)* Technical Report Writing

Presents technical subject matter with emphasis on intensive practice in the various methods of expository writing. Attention given to various technical forms, including instruction, proposal, progress, and feasibility reports. **Prerequisite: ENG 106 or instructor permission*

### ENG 221 (3 credits) Public Speaking

Course includes modes of speech communication, such as demonstration, information, persuasion, and interview.

### ENG 222 (3 credits)* African American Literature (HSS)

Course includes a survey of African American literature from slave narratives to the pan-African experience of the 21st Century. **Prerequisite: ENG 106 with a minimum grade of "C" or instructor permission*

### ENG 238 (3 credits)* Film Appreciation (HSS)

This course introduces students to the art and craft of film. Students will learn about important film genres and become fluent in basic elements of cinema such as narrative style, character development, cinematography, setting, editing, and sound. In addition to studying the technical language of film, students will learn to appreciate film as an art form that expresses a society's values and conflicts. The course is designed to give students who enjoy film the tools to make substantive arguments about the movies they watch.
**Prerequisite: ENG 106 with a minimum grade of "C" or instructor permission*

# History Courses

**Patricia Meley, Instructor**
MA: The Pennsylvania State University
BA: Lynchburg College

### HIST 106 (3 credits) American History I (HSS)

This course surveys American history from the colonial period to the Reconstruction period following the American Civil War. Students gain an understanding of the major events that have shaped American history; learn how American cultural values and character have developed as a result of these events; understand how myths and stereotypes about American history affect our perception of the past and present; and analyze and understand how economics, politics, society, religion, and geography are interrelated and impact on history.

### HIST 111 (3 credits) American History II (HSS)

This course surveys American history from the Reconstruction period following the American Civil War to the Vietnam War. Students gain an understanding of the major events that have shaped American history; learn how American cultural values and character have developed as a result of these events; understand how myths and stereotypes about American history affect our perception of the past and present; and analyze and understand how economics, politics, society, religion, and geography are interrelated and impact on history.

# Health and Physical Education Courses

### HEAL 106 (1 credit) Fitness and Wellness

Offers information that enables students to take control of their personal health and lifestyle habits so as to make a continuous, deliberate effort to stay healthy and to achieve well-being. Students learn to develop personal lifetime programs that promote fitness, preventative health care, and personal wellness.

### HEAL 111 (1 credit) Basic First Aid

Provides individuals in the workplace the knowledge and skills necessary to recognize and provide basic first aid care for injuries and sudden illnesses until advanced medical personnel arrive and take over.

# Mathematics Courses

Any student who takes Pre-Calculus (MATH 207) or Calculus (MATH 213) instead of the two required math course in their program must take an additional 3-credit general education elective to meet their general education requirements.

**Renee M. Alshouse, Instructor**
MEd: Millersville University BS:
Drexel University

**Nasser Bogale, Ph.D., Assistant Professor**
PhD - University of the Cumberlands MEd -
Millersville University
MA - University College Dublin
BSc - Addis Ababa University

**Trina Hess, Professor**
MA: Villanova University
BS: The Pennsylvania State University

**Nora Othman, EdD, Assistant Professor**
EdD; MS: West Virginia University
BS: University of Miami

**Mary Phillips, Instructor**
Med: Millersville University
BSEd: Shippensburg University

### MATH 111 (3 credits)* Business Mathematics

Mathematics skills necessary to do calculations and procedures to operate a successful office or small business. Percentage and simple interest, credit, business ownership, compound interest, payroll and taxes, insurance, mortgages, and home ownership are covered.
**Prerequisite: DMAT 010 (C or above) or Satisfactory Score on Math Placement Exam*

### MATH 126 (3 credits)* Technical Mathematics I

This course is an introduction to the mathematics required of students in technical programs. Designed for students whose academic background does not emphasize algebra or geometry. Includes a review of arithmetic, signed numbers, basic algebra, plane geometry, and other topics. Emphasis is on problem solving.
**Prerequisite: Satisfactory Score on Math Placement Exam*

### MATH 132 (3 credits)* Elementary Geometry

This course is designed for students whose academic background did not emphasize geometry. It covers plane geometry topics, which include basic concepts, parallel lines, triangles, quadrilaterals, and circles. Theorems and postulates are included but emphasis is on measurement and constructions. This course is intended to substitute for Technical Mathematics II for those students who are not required to take General Physics I. It covers the practical geometry that is used in construction majors.
**Prerequisites: MATH 126 (C or above) or MATH 137*

### MATH 136 (3 credits)* Technical Mathematics II

This course covers solving linear and quadratic equations, functions, graphing linear quadratic equations, polynomials, solving trigonometric ratios, solving right triangles and interpreting basic statistics.
*Prerequisites: MATH 126 (C or above) or MATH 137*

### MATH 137 (3 credits)* Intermediate Algebra

This course reviews the structure and use of algebra through a combination of topics including polynomials, first-degree equations, quadratic equations, exponents, radicals, and systems of linear equations. Graphing first and second- degree equations is emphasized.
**Prerequisite: DMAT 030 (C or above) or satisfactory score on placement test, or permission of Math Department*

### MATH 141 (3 credits)* Trigonometry

This course shows how mathematics can be applied in a physical setting. The theoretical foundations will be established and explored but emphasis will be placed on practical applications. Highlighted are the rigonometric functions used to solve right triangles, solving oblique triangles using the Law of Sines and the Law of Cosines, and the graphs of the trigonometric functions.
*Prerequisite: MATH 137 (C or above)*

### MATH 150 (3 credits)* Elements of Statistics

Covers measures of central tendency and variability; probability and normal curve; and sampling and hypothesis testing. Students need to possess mathematical skills necessary to do calculations and derivation of basic formulas.
**Prerequisite: Math 126 with a C or above or higher*

### MATH 207 (4 credits)* Pre-Calculus

Designed to prepare students for continuation into MATH 213: Calculus. Develops the concepts and proficiencies necessary to work successfully in the areas of elementary functions, theory of equations, inequalities, trigonometry and analytic geometry.
**Prerequisites: MATH 137 & MATH 141 (C or above in both)*

### MATH 213 (4 credits)* Calculus

Introduces the concepts and techniques of calculus beginning with functions and limits. Major emphasis is on theory and applications of the derivative, antiderivative, indefinite integral and definite integral, including introductory calculus of trigonometric, exponential and logarithmic functions.
**Prerequisites: MATH 137 & MATH 141 (C or above in both)*
*OR MATH 207 (C or above) or instructor permission.*

# Science Courses

**David W. Manning, Professor**
MA: The Pennsylvania State University
BA: Slippery Rock University

**Patricia A. McKinney, Ph.D., Professor**
PhD: Harvard University Graduate School of Arts & Sciences
BS: Eastern Nazarene College

### BIO 210 (4 credits)* General Biology I

This course explores the processes fundamental to life. Laboratory activities reinforce classroom theoretical content. Topics covered include biochemical principles, cell structure and function, intracellular and intercellular transport and communication, metabolic pathways including cellular respiration and photosynthesis, cell reproduction, Mendelian genetics, inheritance patterns and laws, DNA replication and repair, RNA transcription and processing, protein synthesis, regulation of gene expression, biotechnology and key structural and reproductive characteristics of viruses, bacteria, and protists.
**Prerequisites: High school biology and chemistry strongly recommended. Students must be matriculated in an approved TSCT program of study or obtain instructor permission.*

### CHEM 100 (3 credits) Conceptual Chemistry

This course explores inorganic chemistry principles at the conceptual level. Intermittent in-class laboratory activities reinforce theoretical content. Special emphasis is placed on relating chemical principles to industry, the environment, and everyday events. Topics covered include the atomic structure and classification of matter, the periodicity of elements and their properties, intramolecular and intermolecular bonding, chemical reactions including oxidation-reduction reactions, thermochemistry, solutions, acids/bases, water chemistry, gases, and nuclear chemistry.

### CHEM 110 (4 credits)* General Chemistry I

This course explores the fundamental principles of inorganic chemistry. Laboratory activities reinforce classroom theoretical content. Topics covered include the physical states and properties of matter, scientific measurement, problem solving, periodicity of elements, atomic structure, early and modern atomic theory, electron configuration, nomenclature, chemical composition, chemical equations and stoichiometry, chemical reactions, thermochemistry, chemical bonding and molecular geometry, gas laws, and solutions.
*Prerequisites: MATH 137 (C or above) or instructor permission*

### PHYS 101 (3 credits) How Things Work

This is an introductory physics course that focuses on the ideas, concepts, and engineering behind everyday objects. The history of these objects and their relationships to physical laws are examined. Enrolled students create simple projects to demonstrate their understanding. Only basic mathematical skills are required.

### PHYS 106 (3 credits) Physics for Everyday Life

Brief overview of physics. Includes motion, work, power, energy, and properties of matter, sound, and light. Electrodynamics, atomic physics, and nuclear physics are also discussed. Basic mathematical and algebra skills utilized.

### PHYS 113 (3 credits)* Statics

Elementary, analytical, and practical approach to the principles and physical concepts of statics. Topics include force systems, principles of equilibrium, structural analysis of trusses and frames, friction, centroids, and moments of inertia.
*Prerequisites: MATH 137 (C or above) and MATH 141 or instructor permission.*

### PHYS 207 (3 credits)* Statics and Strength of Materials

Students will learn how forces and moments acting on rigid and deformable bodies affect reactions both inside and outside the bodies. Students will study the discipline of statics as well as the stresses and strains caused by associated internal forces and deformations, the discipline of strength of materials. Topics include force systems, principles of equilibrium, structural analysis of trusses and frames, centroids, stress and strain, and mechanical properties of materials.
*Prerequisites: MATH 137 and Math 141 with a C or higher or MATH 207 or instructor permission*

### PHYS 213 (4 credits)* General Physics I

This course is a four-credit, algebra-based physics course in which one of the credits is devoted toward lab work. The course is an in-depth study of statics, kinematics, dynamics, work, power, energy, and the properties of matter.
*Prerequisites: MATH 137 and MATH 141 (Both with a C or above) or instructor permission*

### SCI 107 (3 credits)* Environmental Science

This course is a comprehensive, multidisciplinary overview of environmental issues and the integral role humans plan in shaping our natural surroundings. Topics covered include energy flow, biotic and abiotic factors in ecosystems, environmental law, terrestrial biomes and aquatic ecosystems, population dynamics, renewable and nonrenewable resources, fossil fuels and alternative energy sources, water resources and pollution, air pollution, ozone depletion, climate change, waste disposal, land and food resources, conservation, and sustainable living.
*Prerequisite: ENG 106 or instructor permission*

### SCI 110 (3 credits) Introduction to Astronomy

Beginning with an understanding of what astronomy studies, the bulk of the course is organized into three main categories: 1) investigating planets in and out of our solar system 2) the life and death of stars and 3) galaxies and black holes/quasars. Students will also learn a few constellations and study the life of the universe and the Big Bang Theory.

# Social Sciences Courses

**Heriberto Arjona, Assistant Professor**
MBA: Universidad Inter-Americana de Costa Rica
BA: Indiana University of Pennsylvania

**Vincent E. Miles, Ph.D., Professor**
PhD, MA: Indiana University of Pennsylvania
BA: Mansfield University of Pennsylvania
AAS: Thaddeus Stevens College of Technology

### ECON 230 (3 credits) Principles of Microeconomics (HSS)
This course introduces students to foundational principles of microeconomic theory, with an emphasis on economic decisions made at the individual or firm level. It describes and analyzes the interaction of supply and demand and the behavior of the prices of goods and services. It explains the determinations of costs, output, strategic pricing, and purchasing decisions under various market structures in a global economy. In addition, it describes the supply and demand for factors of production with an emphasis on graphical formatting.

### ECON 240 (3 credits) Principles of Macroeconomics (HSS)
This course covers ideas, models and concepts to give students a better understanding of our nation's and global economies. We will use references from real-world corporations, government policies, and current events, and explore how events and policies change the market equilibrium. Students will analyze macroeconomic data using equations and conceptual graphs.

### PSY 116 (3 credits) Introduction to Psychology (HSS)
Students learn the major specialties of the field and assumptions upon which they are based. Techniques used by psychologists are discussed.

### SOC 106 (3 credits) Principles of Sociology (HSS)
Provides a systematic interpretation of major elements of sociology, including social dynamics, deviant behavior, social and cultural change, and developing major social trends.

### SOC 121 (3 credits) Critical Thinking (HSS)
Provides an introduction to critical reading, writing, and thinking. Encourages students to pose questions at appropriate times and to have a generally critical attitude toward advertising and other aspects of popular culture.

*(HSS) denotes course fulfills Humanities/Social Sciences requirement or may be used as a General Education elective*

### SOC 206 (3 credits) Sociology of Deviant Behavior (HSS)
Deviant social behavior are discussed. Topics include development of deviant individual's personality; deviant careers; conflicts between the deviant's and the normative social world. Social techniques and patterns used to resolve such conflicts are also covered.

### SOC 216 (3 credits) Multiculturalism (HSS)
Introduction to general issues regarding cultural diversity. A focus on complex and diverse group activities in the contemporary workplace with an emphasis on coping skills with persons from different ethic, gender, religious, and professional backgrounds and perspectives.

### SOC 221 (3 credits) Marriage and the Family (HSS)
Contemporary American marriage and family patterns are discussed. Topics include historical and cross-cultural perspectives, current trends toward urbanization and changing value systems; and cultural, psychological, and social factors involved in the changing American family.

# Business and Applied Arts Courses

**Heriberto Arjona, Assistant Professor**
MBA: Universidad Inter-Americana de Costa Rica BA: Indiana University of Pennsylvania

### ART 106 (3 credits) Intro to Digital Photography
An introduction to digital photography using digital single lens reflex cameras and basic image editing software. This course includes print production for making black-and-white and color photographs and studio techniques that include portrait lighting and still life photography. No prior photography experience is required. Students use digital photography for the production of a photographic portfolio.
**Graphics students may not take this course*

### BUSN 106 (3 credits) Small Business Management
Focuses on the world of small business, including getting involved as an entrepreneur; selecting business opportunities; and keeping the business afloat.

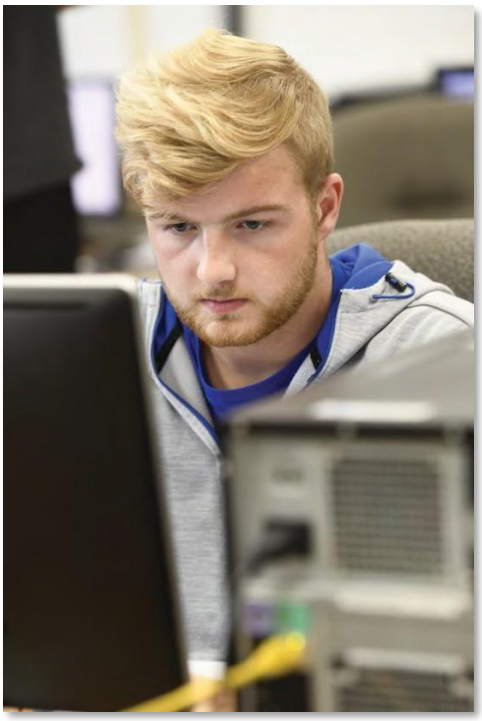
### FIN 102 (3 credits) Personal Finance
The course is primarily concerned with the management of money from the viewpoint of the individual. Topics to be covered include consumer's credit, borrowing, saving and investments, purchase of insurance, real-estate and other major items, the problem of taxation and wills, and controlling expenditures through the use of a budget.

# Special Courses

## ST 100–105 (1–5 credits) Special Topics
Special topics are selected. The topic to be studied is determined by the instructor and approved by the vice president for academic affairs. Credits earned are applicable either as free electives in the program or as credits used for graduation (with the approval of the vice president for academic affairs.)

## TECH 100, 199, 200, or 299 (1–3 credits) Internships
Representing a possibility of four semesters, internships are designed to provide credit for supervised on-the-job work experience directly related to a student's major. Credit varies based upon the total hours worked. The credit-to-work hour ratio is 1 credit = 50 work hours.

These courses include employer supervision and evaluation.



# PreMajor Program

Students may need to complete a course or courses at a foundational level before entering a specific program of study. Students in foundational reading, writing, and mathematics courses are required to earn at least a “C” grade. Students must also pass College Success testing requirements or demonstrate academic excellence in required courses with grades of “B” or higher.

**These courses may not be used to meet graduation requirements.**

# CP 011^ Career Preparation I

Students are introduced to eight different areas of technology, drafting, electronics, graphics, woodworking, engineering, plastics, ceramics, and metals. By exposing students to these eight different areas, students gain a better understanding of each area and how it may apply to them specifically.

*^Must obtain a grade of “C” or higher for successful completion.*

# CP 012*^ Career Preparation II

This is a continuation of CP 011, where students apply advanced concepts to eight different areas of technology, drafting, electronics, graphics, woodworking, engineering, plastics, ceramics, and metals.
**Prerequisite: CP 011.*
*^Must obtain a grade of “C” or higher for successful completion.*

# DENG 099 Integrated Reading and Writing

Integrated Reading and Writing, a one semester course, focuses on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, and length of the assignment.

## DMAT 010^ Fundamentals of Mathematics

Development and improvement of math skills. Fundamentals of Mathematics covers whole numbers, fractions, decimals, percent, measurement, and various other essential topics. For students whose test scores indicate the need for development and/or improvement in fundamental math skills, course must be taken before MATH 126: Technical Mathematics I or MATH 111: Business Mathematics; students may be required to complete DMAT 010 prior to enrollment in DMAT 030. DMAT 010 may not be used to meet certificate or degree requirements. Fundamentals of Mathematics is a one semester course offered during both semesters and summer terms.

*^Must obtain a grade of "C" or higher for successful completion.*


## DMAT 030*^ Introduction to Algebra

Develops fundamental algebra skills necessary in vocational/ technical occupations. Topics include real numbers, solving first degree equations, exponents, polynomials, and factoring. This course may not be used to meet degree requirements.
**Prerequisite: DMAT 010 or by entrance exam*
*^Must obtain a grade of "C" or higher for successful completion.*

## DSOC 010^ Success Strategies

Encourages students to live healthy lifestyles, develop academic skills, foster habits of punctuality, and maintain good attendance records in all classes. Time management, positive attitude, and goal orientation are also covered. Included in this course is a 2.5 hour lab for developing academic technology skills.
*^Must obtain a grade of "C" or higher for successful completion.*

## DSOC 011^ Success Strategies Lab

Provides students with an opportunity to acquire fundamental computer skills and practical knowledge in applications needed for success in college coursework. Hands-on topics include use of the College portal for access to College and course materials, email guidelines, Internet research methods, file management and organization, and software for assisting in compiling research ideas and notes. In addition, exercises will be completed related to word processing (outlining tools, tables and columns to organize lists, report formatting), spreadsheet fundamentals (calculating GPA, budgets, measurement conversions and formulas, timesheets) and presentation software (developing projects).
*^Must obtain a grade of "C" or higher for successful completion.*

Residence Hall Handbook: 2025 – 2026 Volume 1


# Thaddeus Stevens College of Technology Residence Life Handbook 2025 - 2026

# Welcome Bulldogs!

As you embark on this exciting journey, we want you to know that our team is dedicated to ensuring a safe and academically sound environment for all residents. We achieve this by diligently monitoring our halls, engaging with residents, planning events, and upholding the policies that complement our school's values.

Our approach to supporting residents is rooted in the values of ***Respect, Accountability, Integrity, and Teamwork***. Here is how we embody these principles:

- **Respect**: We value the unbiased consideration, treatment, and regard for the rights, values, beliefs, and property of all other people.
- **Accountability**: We value taking responsibility for our actions and the results of those actions; honoring obligations, expectations, and requirements; delivering what is promised; and owning up to mistakes.
- **Integrity**: We value commitment to high moral/ethical standards, honesty, and fairness in teaching and learning, social engagements, and professional practices.
- **Teamwork**: We value working cooperatively and collaboratively as part of a group in which there is a shared mission and vision aligned toward a goal.

Our goal is to help residents become confident in navigating their responsibilities and develop the life skills necessary to excel after graduating from college. We are here to support your college endeavors by encouraging positive connections with your peers, staff, and faculty. We hope these efforts lead to building meaningful relationships and personal development.

Welcome to your new home away from home. We look forward to connecting with you throughout your college journey!

Sincerely,

Dawan Worsley, Director
Office of Residence Life, Student Services

# Table of Contents

## Housing Contract Information

This contract is an agreement between Thaddeus Stevens College of Technology (the "College") and the student, outlining the terms and conditions for on-campus housing. Please read carefully before signing. By signing this contract, you agree to follow the rules outlined in the Residence Life Handbook, the Student Handbook, and other official College publications. This contract is legally binding and may be amended by the College at any time. Failure to uphold the terms of this agreement may result in the following:

- Fines starting at $200.00
- Termination of your Housing Contract
- Expulsion from the College

### 1. Contract Period

This contract covers both the Fall and Spring semesters (August-May). By signing, you agree to reside in College housing for the full academic year. Housing contracts must be renewed annually unless you are no longer enrolled at the College.

To formally cancel your housing contract, you must send an email from your official Thaddeus Stevens College email address to the Director or the Assistant Director of Residence Life. Charges will continue to accrue until your room key/fob is returned and all personal belongings are removed from your assigned room. The College reserves the right to terminate or amend this contract at any time for any reason, with or without notice.

### 2. Housing Charges & Payments

Housing charges are set annually by the College. Payments must be made by the deadlines listed on the College's tuition and fee pages: Tuition - Thaddeus Stevens College of Technology and Pay Tuition and Fees - Thaddeus Stevens College of Technology.

### 3. Meal Plan

All students living on campus are required to have a meal plan. You will either select or be assigned a 5-day or 7-day meal plan, which is managed jointly by the Office of Residence Life & the Business Office (Tuition - Thaddeus Stevens College of Technology).

### 4. Housing Status

On-campus housing is not guaranteed. Priority is given to students residing outside of Lancaster County. You can check your housing status online by logging into Thad's Pad > Student Services > Room Selection.

### 5. Refunds

Please refer to the Refund Schedule - Thaddeus Stevens College of Technology for details on housing refunds. ***Students removed from housing due to policy violations forfeit any housing refund for the current semester.***

### 6. Immunization Requirements

All students must meet the College's immunization requirements before moving in.

## 7. Residency Requirements

To remain eligible for on-campus housing, students must:

- Maintain full-time enrollment status (minimum of 12 credits)
- Have all financial obligations to the College in good standing
- Comply with all policies outlined in the Residence Life Handbook

Students who do not meet these requirements can be terminated from housing. ***Residents who are removed from housing due to policy violations will forfeit any housing refunds for the current semester.***

## 8. Housing Assignments

This contract allows you to occupy an assigned room but does not create a landlord/tenant relationship. Students choose rooms during the housing selection process, which is organized based on sex. The College reserves the right to change room assignments or occupancy at any time. Students must vacate their rooms—taking only essential—during Thanksgiving, winter, and spring breaks. For summer, all belongings must be removed. Early arrivals or late departures are not permitted without prior written approval from the Office of Residence Life. Occupying a shared room (double/triple) without approval—by placing personal items on all beds or sides of the room—will result in a minimum $200 fine. Allowing an unassigned person to live in or move into your room will result in a minimum $500 fine and/or housing contract termination.

## 9. Liability

The College is not responsible for theft, loss, or damage to your personal property. Students are strongly encouraged to obtain personal property insurance.

## 10. Room Entry/Searches

The College reserves the right to enter and, if necessary, search your room for health, safety, or policy reasons. Your presence is not required during entry or search. Items found in violation of law or College policy may be confiscated and removed from the room.

## 11. Legal Enforcement

This contract is governed by Pennsylvania law. You are responsible for any legal or collection fees the College incurs in enforcing the terms of this contract, including those related to unpaid fees.

_____ _____

Printed Student Name Date

_____

Signed Student Name

## Residence Life Handbook Overview

The Residence Life Handbook ('Handbook') is an important resource for understanding life within the Thaddeus Stevens College of Technology (TSCT) community. While it may not cover every situation, the Handbook addresses many common questions that residents often have. For additional information, residents are encouraged to visit the Residence Life website or contact the Office of Residence Life personnel for further support.

## Mission Statement

Thaddeus Stevens College of Technology educates Pennsylvania's economically and socially disadvantaged and other qualified students for skilled employment in a diverse, ever-changing workforce and for full effective participation as citizens.

## Vision Statement

Thaddeus Stevens College of Technology will be the best two-year technical college of its kind by adding value to the lives of our students so that they will find skilled employment, be effective citizens, and reach their full potential.

## Core Values

Thaddeus Stevens College of Technology is committed to structuring and maintaining its daily functions around the following core values: integrity, diversity, respect, teamwork, learning and growth, and accountability.

***Integrity*** - We value the commitment to high moral/ethical standards, honesty, and fairness in teaching and learning, social engagements, and professional practices.

***Diversity*** - We value the recognition of the variety of unique individuals within our world and the interdependence upon each other, each other's culture, and the natural environment. We value the differences and respect the qualities and experiences that are different from our own.

***Respect*** – We value the unbiased consideration, treatment, and regard for the rights, values, beliefs, and property of all other people.

***Teamwork*** - We value working cooperatively and collaboratively as part of a group in which there is a shared mission and vision aligned toward a goal.

***Life-Long Learning*** – We value the relentless dedication to increasing the knowledge and competences of all individuals associated with the College. We recognize that human resources are the College's only sustainable competitive advantage.

***Accountability*** - We value the taking of responsibility for actions and the results of those actions; honoring obligations, expectations, and requirements; delivering what is promised; and owning up to shortcomings and mistakes.

# Residence Life Staff Information

The Residence Life staff is composed of professionals and paraprofessionals who conduct the day-to-day operations within the department. Below is a list and description of the different staff positions.

- **Director of Residence Life**
  Professional staff who leads the Office of Residence Life, managing department operations, supervising professional staff, budgeting, housing assignment processes, and facilitating the student conduct processes.
- **Assistant Director of Residence Life**
  Professional staff who leads the Office of Residence Life, supporting department operations, supervising professional staff, managing community engagements and student resources, budgeting, and hearing conduct cases.
- **Campus Hall Director (CHD)**
  Professional staff who work directly in the Residence Halls and manage administrative operations for supervising student assistants, crisis intervention, building communications, room care reports, coordination of openings and closures, community engagements, resident resources, and enforcing policies.
- **Student Assistant (SA)**
  Student staff members live in the residence halls and are knowledgeable about both department and college policies. They are responsible for performing rounds of the residence halls, mail distribution, policy enforcement, and cleaning of common areas.

## Need Assistance?

Office Hours: Monday-Friday 10:00 am – 9:00 pm
Residence Life website for move-in dates, residence hall openings and closings.
Email: reslife@stevenscollege.edu

# Residence Hall Security and Safety

Failure to comply with a request from residence life staff, security staff, or College personnel—or to show respect for their authority—will result in disciplinary action. While there is no requirement to carry theft or fire insurance for your belongings, you may want to consider purchasing coverage.

## 2.1. Fire Safety Compliance

### 12.2.1.1 Fire Safety Violations

- **Tampering with Fire Safety Equipment:** Interfering with fire extinguishers, fire alarms, smoke detectors, sprinkler systems, or any other fire safety devices is strictly prohibited. Violations may result in fines of up to $500 or more.
- **Improper Use of Fire Safety Equipment:** Hanging objects from, covering, or removing batteries from fire safety devices is prohibited. Violations may result in fines of up to $500 or more.

- **Prohibited Fire Hazards:** The use of open flames (e.g., candles or incense), smoking in the Residence Halls, or engaging in any behavior that increases fire risk is not allowed. Violations may result in fines of up to $500 or more.
- **Failure to Evacuate:** Students who do not evacuate the building during a fire alarm will face disciplinary sanctions, including possible fines of up to $500 or more.

## 2.2 Security and Access Control

- **Get to know your professional staff, neighbors, and building** as soon as possible. Every resident plays a role in maintaining a secure environment by recognizing who belongs in the building and who does not.
- **Always lock your room door when you leave** and encourage your roommates to do the same.
- **Keep external doors always locked. Never prop them open.**
- **Propping doors open is a serious security risk** and one of the most common security breaches on college campuses. It increases the chance of unauthorized access, violates campus security policies, and may breach the Clery Act, which requires institutions to prevent unauthorized entry.
- **Do not allow strangers into the building.** Never let someone "tailgate" behind you when entering with your access card.
- **Face coverings such as hoods, ski masks, or Halloween masks are not permitted** inside residence halls. This ensures individuals can be easily identified by staff and helps prevent authorized access.
- **Do not lend your room key or college ID to anyone.** Sharing these items violates your Residence Life agreement.

## 2.3 Missing Resident Student Notification Policy

In compliance with the Higher Education Opportunity Act, 2008, 122 STAT. 3301 and consistent with the College's commitment to student safety, this policy provides the procedures for reporting, investigating, and making emergency notifications regarding any resident student deemed missing.

If there is any indication of foul play, the Pennsylvania State Police will be contacted immediately. If circumstances warrant, this policy and procedure may be implemented in less than 24 hours.

### 2.3.1 Definition of a Missing Student

A student is considered missing when their absence is inconsistent with their usual behavior and cannot be reasonably explained. Before presuming a student is missing, reasonable efforts should be made to determine whether the student is at their off-campus residence or whether individuals familiar with the student has seen, heard from, or know their whereabouts.

### 2.3.2 Notification Process

At the start of each academic year, the College will inform on-campus resident students that if they are determined to be missing, the College will notify a parent or designated individual within 24 hours. It is the student's responsibility to ensure their emergency contact information is current and accurate, registered through the Office of Student Services.

If the student is under 18 and not legally emancipated:

- The College is required to notify a custodial parent or legal guardian within 24 hours.
- The College will also notify the appropriate law enforcement agency within 24 hours of determining the student is missing.

### 2.3.3 Internal Notification Procedure

Upon receiving a missing student report from Security, Office of Student Services, or another credible source, the following departments will be notified: College Security, President's Office, Vice President for Finance and Administration, Vice President of Student Services, and Director of Residence Life.

The report will be immediately referred to College Security. If, after investigation, the student is determined to have been missing for 24 hours, the College will notify:

- the individual identified by the student as their emergency contact
- the custodial parent or legal guardian (if under 18 and not emancipated),
- local law enforcement

If foul play is suspected at any point, Pennsylvania State Police will be contacted immediately.

### 2.3.4 Search and Investigation Resources

Upon notification that a student may be missing, the College may use any combination of the following resources:

- Entry into the student's room by authorized personnel
- Search of on-campus public locations (e.g., library, cafeteria); distribution of the student's ID photo
- Inquiries with known friends, family, and faculty
- Review of ID card access logs for last use and future activity
- Access to vehicle registration information
- Review of email login activity by the IT department

### 2.3.5 Communication of Policy

Students will be informed of this policy through the College website, at student orientation, the annual Campus Security report, college-issued email, and Residence Hall meetings.

# Room Management: Assignments, Changes, and Closures

## 3.1 Room Assignments

The College reserves the right to make residence hall assignments, temporary room

assignments, consolidations, and reassignments as needed, or when deemed in the best interest of the student and/or residence hall.

## 3.2 Room Key

Each resident will be issued either an ID card or hard key for their assigned room.

- **Electronic Card Reader Rooms:** Once activated, your student ID will unlock your room. Any hard keys issued must be returned to the Campus Hall Director. **Lost or damaged ID cards can be replaced for $10 at the Business Office (Mellor building, 1st floor).**
- **Standard Lock and Key Rooms:** If your room does not have an electronic card reader, you will be issued a hard key. Always keep it with you. If you lose your hard key, the lock core will be changed with new keys issued (pending availability). **A $55 fee will be charged to the resident for lost keys.**
- **Lockouts:** If you are locked out, contact your Residence Hall Advisor or Security. Security is available 24/7 and can provide access. **A $35.00 fee will apply for each lockout**.

## 3.3 Room Management and Personal Belongings

### 3.3.1 Personalization

You may decorate your room, provided all items follow residence hall guidelines and reflect good taste and decency. If you are unsure whether an item is appropriate, check with your Campus Hall Director.

### 3.3.2 Allowable Items

You are permitted to bring the following items to your residence hall room:

- Twin XL bedsheets (*Reighard Hall requires full-size sheets*)
- Pillows and pillowcases
- Laundry bag & high-efficiency detergent
- Shower shoes
- Shower caddy (e.g., soap, toothpaste, toothbrush, washcloth, towels)
- Fan
- Micro-fridge (maximum 5.0 cubic feet)
- TV (42 inches or smaller; note: the College provides internet but not cable TV)
- Lamp (must have metal or steel shade/casing)
- Cleaning supplies (broom, vacuum, Clorox wipes, trash bags, disinfectant spray, air fresheners)
- Wall-safe tape or push pins for hanging décor
- Surge protectors
- Bicycles (must be stored on bike racks only; never inside residence halls)
- Bean bag chair
- Electric water heater (must have auto shut-off safety feature)

- Desktop computer, laptop, or tablet

**If you are unsure about any items, contact the Office of Residence Life before bringing it.**

### 3.3.3 Personal Belongings

- **Security of Personal Items:** Residents are responsible for securing their belongings, especially valuable or easily portable items. Use personal safes, cable locks for laptops, and engrave valuables with unique identifiers.

  **Liability Notice:** The College assumes no responsibility for lost, stolen, or damaged personal belongings. Students are strongly encouraged to obtain personal property, fire, theft, and liability insurance. The College's insurance does not cover student property or personal liability at any time.

- **Move-Out requirements:** Students who withdraw or dismissed from the residence hall must vacate their assigned room within 24-48 hours. The College will make a reasonable effort to contact the student regarding any belongings left behind via phone, email, or both. Unclaimed items will be stored for up to 7 days. After that, they will be considered abandoned and may be discarded.

### 3.3.4 Responsibility

**Furniture**

Residence hall furniture provided by Thaddeus Stevens College of Technology may not be disassembled, stacked, or altered in any way. All College-owned furnishings must remain in the assigned room, and lounge furniture must remain in designated common areas. Students are not permitted to bring additional furniture into their rooms unless it has been approved by the Office of Residence Life. Any changes to the arrangement or configuration of College-provided furniture may only be made with prior approval from Residence Life staff.

**Room Care**

Residents are expected to always maintain their rooms in a clean and sanitary condition. This includes regularly washing clothing and bedding, properly storing or disposing of food to prevent hygiene issues and ensuring that trash is bagged and taken to designated disposal areas. Hanging food from windows or storing it for extended periods is prohibited. If a room is found to be excessively dirty, the residents will be required to clean the area within a specified timeframe. Failure to comply may result in a minimum fine of $50 and could lead to removal from campus housing if the condition persists.

## 3.4 Prohibited Items and Activities

### 3.4.1 Prohibited Items

The following items and activities are strictly prohibited in the residence halls. This list in not exhaustive. If you have questions about a specific item or activity, consult the Office of Residence Life.

- Microwaves, toasters, grills, skillets, open coil devices, electric cooking appliances, portable heaters, air fryers, irons, coffee makers or water heaters without an automatic shut-off feature, and any other open heat appliances
- Refrigerators larger than 5.0 cubic feet
- Decorations deemed offensive or inappropriate by the College
- Adhesive hanging lights or items (only wall-safe tape or push pins are allowed)
- Any animals, including fish, unless approved through the Office of Accessibilities and the Office of Residence Life
- Lamps with plastic coverings
- Candles, incense, fireworks, or any other open flame devices or flammable liquids
- Live-cut or artificial Christmas trees and other flammable decorations
- Electrically amplified instruments, DJ equipment, or drum sets
- Extension cords and multi-outlet adapters that are not surge protectors
- Personal wireless routers, as they interfere with the campus network
- Weights or fitness equipment exceeding 15 pounds
- Weapons of any kind, including darts/dartboards, firearms or ammunition, toy guns or ammunition, BB or paintball guns, swords, or similar items
- Drug or alcohol paraphernalia, including containers, posters, or advertisements

### 3.4.2 Prohibited Activities

- The following actions are not allowed in or around residence halls:
- Playing hall sports or outdoor activities indoors (e.g., basketball, football, snowball fights, water balloons, roller skating, bike, or scooter riding, hoverboarding, etc.)
- Playing music or using TV speakers directed out of windows
- Practicing musical instruments in lounges or common areas
- Moving into another room or occupying a vacant space without prior approval from the Office of Residence Life
- Sharing your room key/fob or student ID with anyone else
- Playing loud music in bathrooms
- Entering bathrooms while custodial staff is actively cleaning
- Throwing objects from windows
- Removing or tampering with window screens
- Using windows as entry or exit points
- Sitting on windowsills

## 3.5 Room Consolidations

The Office of Residence Life will conduct a room consolidation process for residents who do not have a roommate and are not assigned to designated single rooms. This process typically occurs after each room change period or at other times during the semester as needed.

Residents in double rooms without a roommate during these times are required to participate in the consolidation process. Failure to do so will result in being charged the single-room rate for the semester.

During the process, affected residents will have the opportunity to select a new roommate or room from a list of others also required to consolidate. If a resident does not inform the Office of Residence Life of their choice by the assigned deadline, they will be charged the single-room rate for the semester.

## 3.6 Room Change Process

### 3.6.1 Fall or Spring Semester (Beginning Week 6)

- Voluntary room changes may begin in the sixth week of the Fall or Spring semester.
- To initiate a room change, contact your Campus Engagement Coordinator.
- The room change period closes at the end of October in the Fall and after Spring Break in the Spring semester.

### 3.6.2 Outside the Scheduled Room Change Period

- Requests outside the designated room change period will be considered on a case-by-case basis by the Office of Residence Life.
- To request a room change, contact your Campus Hall Director.

**IMPORTANT: Residents who move to another room or take over a vacant space without approval from the Office of Residence Life will be fined $200 and may lose the privilege to participate in future room change opportunities. All room changes are subject to availability and must be approved in advance.**

## 3.7 Residence Hall Closures

The residence halls will be closed during Thanksgiving, Winter, and Spring breaks. They will close at 6 pm on the day before each break period begins. **Residents must vacate their rooms by that time, taking only what they need.** For Summer Breaks, residents must ***remove all personal belongings*** from their rooms, regardless of whether they plant to return the following academic year.

### 3.7.1 Residence Hall Hours During Closure

- Residence Halls will close at 6:00 pm the day before each vacation period.
- Residence Halls typically reopen at 1:00 pm on the day students return from break.

### 3.7.2 Departures and Non-Returning Residents

Students who are not returning to housing after break must:

- Remove all personal belongings from the room
- Clean the living space and dispose of all trash and food
- Return all keys to the designated Residence Hall drop box or the building manager

**Failure to follow these steps will result in charges for improper checkout, cleaning, or damages.**

### 3.7.3 Extenuating Circumstances

Residents with extenuating circumstances during closures should follow all break closing instructions sent via email and have proof of their hardship ready for review. Office of Residence Life personnel will approve or deny any requests to stay during closures.

### 3.7.4 Residence Hall Deadline or Extended Stay during breaks

Anyone who misses the deadline for submitting a request to stay or who is found staying on campus while not approved by the office of residence life will be charged $150 per day during breaks.

### 3.7.5 Meal Hours During Closure

- Meals will be served up to and including lunch on closing days.
- Meals will NOT be served again until dinner the day before classes resume.
- Jones Dining Hall, Campus Grille, and Orange Street Café close at 1PM last day of classes before break.

### 3.7.6 Storage

The College does not offer storage space to residents. Between the fall and spring semesters, students may leave their belongings in their rooms at their own risk, provided they are returning to the exact same room for the spring semester.

### 3.7.7 Room Care Inspections

Residence Life staff will begin inspecting rooms after 6pm on the day of closure to ensure that all procedures have been followed. Any rooms that do not meet the requirements will be subject to fines and cleaning charges.

### 3.7.8 Abandoned Property

Any personal items left in rooms after the end of the semester will be considered abandoned. Residence Life reserves the right to dispose of these items at their discretion, along with charging residents for not removing personal items.

## 3.8 Summer Housing

Thaddeus Stevens College of Technology offers on-campus housing during the summer term for students who are enrolled in at least one class or an internship. To be eligible, students must complete a summer housing contract after scheduling their summer classes.

### 3.8.1 Eligibility & Enrollment

**Class/Internship Requirements:** Students must be enrolled in a summer course or internship through Thaddeus Stevens College of Technology to qualify for housing.

### 3.8.2 Summer Housing Contract

**Charges:** Those living on campus during the summer will be charged weekly from the last week of May to the first week of August.
**Specific Dates**: Students are responsible for knowing the exact weeks they will need housing. These dates must be entered in the contract to ensure proper accommodation and planning.

### 3.8.3 Relocation for Summer Housing

All students requiring summer housing will be relocated to designated summer housing prior to the start of classes. Information about the housing and move-in dates will be provided by the Office of Residence Life.

## 3.9 Damages and Charges

### 3.9.1 Damages

Residents assigned to a room will be charged for any damages, excessive cleaning, or missing College property. Charges will be based on the cost of materials and labor. All costs are subject to change without notice, depending on the actual price of repairing or replacing damaged property.

If the person responsible for damage in the residence hall is not identified, the cost of repair will be shared by the students living on that floor or, if necessary, the entire residence hall population. Please report any observed room or residence hall damage to the Campus Hall Director immediately.

### 3.9.2 Charges and Fines

| VIOLATIONS | CHARGE/FINE |
|---|---|
| Alcohol (Refer to Drug-Free Campus Policy) | $500 |
| Drugs (Refer to Drug-Free Campus Policy) | $500 |
| Moving Rooms Without Approval | $200 |
| Taking Over Vacant Spaces Using Personal Items | $518 |
| Locked Out of Room | $35 |
| Lost Room Key | $55 |
| Lost TSCT ID | $5 |
| Lost fob (Reighard Hall Only) | $20 |
| Lost Parking Pass (Reighard Hall Only) | $25 |
| Room Care Inspection Failure | $25 |
| Room Care Damages | $150 plus costs of parts and labor |
| Common Area Damages | $150 plus costs of parts and labor |
| Residence Hall Closure (You stay over break without prior approval from Residence Life personnel) | $150 per day |
| Residence Hall Closure (You fail to complete the required Closing Checklist) | $150 |

## 3.10 Room Entry

The College does not intend to conduct unreasonable or unwarranted room searches. Its sole purpose is to maintain a safe and secure environment that supports students' residence, study, and pursuit of educational goals.

### 3.10.1 Authorized Room Entry Conditions

**Staff will enter student rooms with discretion and only under specific conditions:**

1. **Maintenance and Repairs**
   Authorized staff may enter rooms to perform essential maintenance or repairs as needed.
2. **Health and Safety Inspections**
   These inspections occur at least once per semester to ensure the well-being of residents and compliance with health and safety standards.
3. **Emergency Situations**
   Staff may enter rooms during emergencies (e.g., fire, flooding, medical crises, etc.) to ensure the safety of residents.
4. **Disruptions to the Community**
   If unattended items (e.g., stereos, alarm clocks, or other devices) create disturbances, staff may enter to resolve the situation, but only with the approval from Residence Life staff.
5. **Regulation Compliance**
   If Residence Life staff reasonably suspects that a room contains items violating College regulations, or local, state, or federal laws, they may enter to investigate.

### 3.10.2 Room Inspections

The Office of Residence Life and other authorized personnel reserve the right to enter any room space with or without the resident's permission or presence. These inspections may be scheduled or random, and may occur in the following circumstances:

- Periodically throughout the year
- After any break closure
- When there is a room vacancy
- For reasonable suspicion of policy violations or safety concerns

## 3.11 Search and Seizure

The College aims to maintain a safe, secure, and supportive environment for all students. While students are protected from unreasonable searches and seizures, College officials may search residence hall rooms, lockers, or vehicles when there is **reasonable or just cause** to believe that:

- Illegal activity is taking place,
- College policies or the Student Code of Conduct are being violated, or
- The health, safety, or welfare of the community is at risk.

Comprehensive searches are conducted discreetly and typically involve two staff members from Residence Life and/or Security. If available, the student assigned to the room will be present during the search. Such searches are most likely to occur during the week when students and staff are present.

**Examples of reasonable or just cause include** (but are not limited to):

- Smoke or burning odors (e.g., fire, cigarettes, incense, candles, or illegal substances)
- The smell of alcohol from a room, vehicle, or locker
- Evidence of illegal or prohibited activity
- Indications of weapons or explosives
- Any activity threatening the health or safety of others

All students must read and sign the Search and Seizure form before moving into the residence halls, confirming their understanding of this policy.

# Behavioral Expectations

## 4.1 Drug and Alcohol Policy

All students are expected to adhere to the College's policy on drugs and alcohol, promoting a safe and respectful living environment for all residents. Violations of this policy will not be tolerated and will result in disciplinary action.

Drugs and alcohol (*including possession, use, and paraphernalia*) are prohibited in the residence halls and on campus. Refer to the Drug-Free Campus Policy in the Student Handbook for more details.

## 4.2 Smoking Policy

To maintain a healthy and respectful living environment, all students are expected to comply with the College's smoking policy. Smoking in unauthorized areas or violating these regulations will lead to disciplinary action.

Tobacco products include, but are not limited to, chewing tobacco, snuff, cigarettes, e-cigarettes, cigars, cigarillos, pipes, and bidis.

Vaping/tobacco use is prohibited in and on all College property, including College vehicles, **with the exceptions listed below:**

**Gazebos at the following locations:**

- Griscom Education Center Pergola
- Pergola between Herrington & Armstrong Hall
- Between Leonard & Woolworth Buildings
- Between Kreider & Leonard Buildings
- Greiner Location

**Designated smoking areas at the following locations:**

- Hartzell Parking Lot

- Greenfield Parking Lot
- Greiner Location
- Transportation Center Parking Lot

Hookahs, (*multi-stemmed devices used for smoking flavored tobacco*) are banned from all college property and vehicles **without exception.** Refer to the Smoking (Vaping/Tobacco) Policy in the Student Handbook for more details.

## 4.3 Noise/Disturbance Policy

An atmosphere conducive to living and study must be maintained 24 hours a day in the residence halls and surrounding areas. Respect for the rights and freedoms of other residents will be the standard for behavior.

## 4.4 Quiet Hours

- Sunday night to Friday morning: 10pm to 10am
- Friday night to Sunday morning: 12am (midnight) to 10am
- Finals Week: 24/7, ALL DAY
- No loud music in bathrooms

## 4.5 Failure to Comply

Students are required to comply with directives from Residence Life, Security, or any College personnel.

## 4.6 Having a Good Relationship with Roommates

Living with roommates is a significant part of the college experience and can greatly contribute to your time at Thaddeus Stevens College. Successful roommate relationships are built on mutual respect, open communication, and a willingness to compromise. Below are some guidelines to help you navigate your roommate experience:

### 4.6.1 Set Clear Expectations

When you move in, have a conversation with your roommate(s) about expectations for the living space. Having these conversations early can prevent misunderstandings later. Topics to discuss might include:

- **Quiet Hours and Study Time**: Agree on times when the room should be quiet for studying or resting.
- **Sharing Responsibilities**: Divide cleaning tasks or other responsibilities such as taking out the trash.
- **Guest Policies**: Discuss if or when it is okay to have guests over and set any boundaries for overnight visitors according to the college's guest policies.
- **Use of Personal Items**: Decide whether to share items (such as supplies or food) or keep them separate.

### 4.6.2Respect Each Other's Space and Belongings

Respect is key to living harmoniously. Avoid using your roommate's personal belongings without permission and be mindful of keeping common areas tidy. Small actions, like cleaning up after yourself in shared spaces, can go a long way in maintaining a positive environment.

### 4.6.3 Communicate Openly and Honestly

Good communication is essential to any roommate relationship. If something is bothering you, address it early before it escalates. Be polite and solution-focused when discussing concerns. Also, be open to listening to your roommate's concerns and work together to find a compromise that works for everyone.

### 4.6.4 Manage Conflicts Constructively

Conflict is normal in any shared living arrangement, but how you manage it makes a difference. If a conflict arises:

- **Stay Calm**: Try to remain calm and approach the conversation without hostility.
- **Address the Issue, Not the Person**: Focus on the behavior causing the problem, not the person's character.
- **Find Solutions Together**: Work together and compromise to resolve the issue.

If you are unable to resolve conflicts after applying the above methods, Residence Life staff can facilitate roommate mediations.

### 4.6.5Be Considerate of Each Other's Needs

Everyone has different needs when it comes to things like sleep, study time, and socializing. Being considerate of your roommate's preferences and routines is important for coexisting peacefully. For example, if your roommate is studying for an exam, keep noise levels down, or if they have an early morning, avoid turning on bright lights late at night.

### 4.6.6 Reach Out for Help

**Engage with Professional Staff**: For ongoing or complex conflicts, professional Residence Life staff members will assist in exploring further solutions, which may include alternative housing arrangements if necessary.

# Guest Policies, Residence Hall Community, and Involvement

## 5.1 Guest Policy

- **Guest Definition:** A guest is anyone not assigned, by contract, to a bed in the Residence Halls they are visiting, including residents visiting rooms other than their own.
- **Responsibility:** Students are responsible for the behavior of their guests. Any guest behavior in your room will be held to your standards.

- **Accompaniment:** Guests must always be accompanied by their host while on campus.
- **Compliance:** Hosts must ensure that guests follow all College regulations, including the Student Code of Conduct.
- **Registration:** Failure to register a guest or provide accurate registration details (e.g., guest age) can result in disciplinary actions.
- **ID and Key Security:** A resident should **NEVER LEND THEIR SCHOOL I.D**. or **ROOM KEY to ANYONE.**
- **Roommate Consent:** All residents must receive verbal consent from roommate(s) before having guests in the room. If there is a disagreement, the whole room may not have visitors until all contracted residents agree.
- **Moving In/Out Days:** Guests may help the student fully move in or out of their residence hall. During this time, the guests may be under 18 and/or not possess appropriate ID.
- **Guest Restrictions: NO GUESTS ARE PERMITTED DURING THE FIRST TWO WEEKS AND THE LAST TWO WEEKS OF CLASSES EACH SEMESTER,** unless the resident is fully moving in or out.

### 5.1.1 All Guests Must:

- Be 18 years or older
- Possess a valid state ID., Driver's License, or Thaddeus Stevens College ID
- Wait at the front door or lobby of the residence hall for resident to meet them.
- Both the resident and guest register at Residence Hall where the guest will be visiting
- Guest must add the following information to the guest registry:
  - Upload a clear headshot selfie
  - Upload a valid state ID., Driver's License, or Thaddeus Stevens College ID
  - Complete all required fields

Resident and guest must always stay together on campus.

Residents who host a guest that is suspended or banned from campus will have their housing contract terminated or adjusted.

### 5.1.2 Visitation Hours

- Sunday through Thursday: 10am to 10pm
- Friday and Saturday: 10am to 12am (midnight)
- Residents are allowed to sign in one guest at a time

## 5.2 Overnight Guest Policy

The standards outlined in the Guest Policy still apply, **in addition to the following**:

- No guests are permitted during the first two weeks and the last two weeks of the semester (excluding move in/out days).
- Residents must have verbal consent from their roommate(s) for overnight guests.

- Only one guest may be signed in overnight per resident.
- Overnight guests:
  - are permitted only on Fridays and Saturdays.
  - must be registered in the guest registry
  - receive a physical guest pass from the MAC or Griscom Security Office.
  - Must always remain with their resident host
  - Must keep their guest pass on them.
  - Guests must sign out of the residence hall by 10pm on Sunday.

## 5.3 Getting Involved in your Residence Hall

The Office of Residence Life staff may hold mandatory hall meetings to address concerns or share important information. Residents will be notified at least 48 hours in advance, whenever possible, via email and/or flyers posted in the residence hall. If a student cannot attend a mandatory meeting, they should notify their Campus Hall Director at least 24 hours in advance.

If you are interested in meeting new people, advocating for residents, and making a positive impact in your community, consider joining the Residence Hall Council. For more information, email reslife@stevenscollege.edu.

# Facilities and Amenities

## 6.1 Internet Access in Residence Halls

All residence halls offer wired and wireless internet access. The use of personal wireless routers or access points is prohibited in college residence halls.

## 6.2 Laundry Facilities

Each residence hall is equipped with washers and dryers for student use at no cost. Students are expected to remain with their laundry, as the College is not responsible for any losses or damage. Laundry should be removed promptly when the machine cycle ends. Only high-efficiency laundry detergent or a maximum of two pods should be used in the machines, as other detergents or excessive amounts may damage the machines. Additionally, do NOT overload the machines.

## 6.3 ATM Location

PSECU ATM is located at Griscom Education Center, 1st Floor.

## 6.4 Mail & Packages

### 6.4.1 Incoming Mail & Packages

- Residents will receive a notification email when they have incoming mail and/or packages.

- Incoming mail will be held for **5 days**. If not picked up within this time frame, it will be returned to the sender as unclaimed.
- Students must bring their **Student ID** when picking up their mail.
- Address Details for **Mail & Packages**:
    - **Main Campus & Griscom Education Center** Residents
      First and Last Name
      750 E. King St
      Name of Residence Hall You Reside in
      Lancaster, PA 17602
    - **Reighard Hall** Residents
      First and Last Name
      Reighard Hall
      101 Shenks Lane
      Millersville, PA 17551
- Address Details for **Food Deliveries**:
    - **Main Campus** Residents
      Same Address for Mail/Packages
    - **Griscom Education Center** Residents
      First and Last Name
      1100 E. Orange St
      Griscom Education Center
      Lancaster, PA 17602
    - **Reighard Hall** Residents
      Same Address for Mail/Packages

### 6.4.2 Outgoing Mail

Outgoing mail (with appropriate postage) can be dropped off at Mellor Business Office.

**Required Format for On-Campus Student Mailing Address:**

Student Name
750 East King Street
Lancaster, PA 17602

**Security Concerns**

Lancaster City Police may be notified in the following situations:

- A package raises suspicion.
- A package requires the signature of someone 21 or older.
- The package is stained, leaking, or contains powder residue.
- The package originates from a munitions or firearms company.

## 6.5 Disability and Accessibility Resources

Thaddeus Stevens College of Technology is committed to ensuring all students have equal access to educational opportunities. Accessibility can apply to many areas, including disability and access resources, health and wellness services and student support and services. Students can qualify for accommodations under the ADA if they have a diagnosis or temporary condition that affects any of these areas. provides support to students with disabilities by coordinating accommodations to remove barriers in courses, programs, services, and activities.
Students requesting accommodations or services due to a disability are required to submit documentation to determine eligibility. To receive accommodations, students must:

1. Make the request themselves, NOT the parent.
2. To request accommodations online:
    - Complete the confidential.
    - Attach current documentation of your disability.
    - Submit the Accommodation Request Form along with the documentation.
3. Participate in an interactive process with the Accessibility Office to determine reasonable accommodations tailored to your needs.
4. Students with disabilities have the right to:
    - Equal access to all College offerings, including courses and campus facilities.
    - Reasonable accommodations, including academic adjustments and auxiliary aids, to support their learning experience.
    - Confidentiality regarding their disability, except where disclosure is required by law.

For more information or to register for services, contact Michelle Cherubin, Accessibilities Coordinator at: cherubin@stevenscollege.edu.

## 6.6 College Health Services

Thaddeus Stevens College is committed to supporting the health and well-being of its students. College Health Services offers a variety of medical and wellness services at no charge. These services are provided by registered nurses at Thaddeus Stevens College campus and locations.

### 6.6.1 Services Offered:

- **Medical Services**: General care, including diagnosis and treatment of acute and chronic illnesses, injury management, immunizations, and preventative care.
- **Health Education**: Programs and resources on wellness education such as nutrition, exercise, stress management, and substance abuse prevention.
- **Referrals**: College Health Services can refer students to specialized medical professionals or services within the community as needed.

### 6.6.2 For more information or to access services, contact College Health Services:

- Visit the Health Services website
- Main Campus**:** 717-299-7769
- Griscom Education Center: 717-299-7702

- Email Melissa Meshey, RN, Nursing Supervisor at: meshey@stevenscollege.edu

**On-Campus Counseling Services**
717-391-7213

**Suicide Prevention Hotline**
1-800-273-8255

## 6.7 Counseling Services

Thaddeus Stevens College offers Counseling Services to support students' mental health and emotional well-being. These services help students navigate personal challenges, develop coping strategies, and achieve their academic goals.

### 6.7.1 Services Offered:

- **Individual Counseling:** Students can meet one-on-one with a licensed counselor to discuss personal concerns, mental health issues, or academic stress.
- **Group Counseling:** Group therapy sessions allow students to connect with peers who may be experiencing similar challenges, offering support and shared experiences.
- **Crisis Intervention:** Immediate support is available for students in crisis. Counseling Services provides assistance with urgent mental health needs.
- **Workshops and Programs:** Regular workshops and programs address various topics, such as stress management, mindfulness, and coping skills.

### 6.7.2 Confidentiality:

All counseling sessions are confidential, adhering to ethical guidelines and legal requirements. Information shared during sessions will not be disclosed without the student's consent, except in cases of imminent harm or as required by law.

For more information or to register for services, contact Michelle Marmo, Counselor at:

- Visit Mental Health Counseling website
- Phone: 717-391-7213
- Email: mentalhealth@stevenscollege.edu
- Location: Griscom Education Center, 1st floor

## Need More Help?

If you still have questions or need assistance, Residence Life personnel can provide additional support. You can email us at Residence Life at reslife@stevenscollege.edu.
We are here to help you make the most of your time at Thaddeus Stevens College. Feel free to reach out whenever you need guidance or resources!