



CONSTRUCTION TRADES

Technical Diploma Program Code: 30-475-1 Total Credits: 11

Mid-State's Construction Trades technical diploma provides the foundation knowledge and experience to get started in the construction, carpentry, plumbing, electrical, and pipefitting fields. Graduates understand the various components of building construction systems as well as proper and safe tool use and installation techniques for piping, heating, and electrical systems. Successful completion of the diploma prepares students for an entry-level position in the construction trades industry. The program includes work in an interactive hands-on lab and a year-round larger lab complete with an "indoor house." Through exposure to multiple fields and industries, graduates are prepared to enter the trade they choose.

Estimated tuition and fees: mstc.edu/programcosts

ACADEMIC ADVISOR

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

CHECKLIST:

This section will be completed when meeting with your academic advisor.

- FAFSA (www.fafsa.gov)
- Financial Aid Form(s)
Form(s): _____
- Follow-Up Appointment:
Where: _____
When: _____
With: _____
- Official Transcripts
Mid-State Technical College
Student Services Assistant
1001 Centerpoint Drive
Stevens Point, WI 54481
- Other: _____



mstc.edu • 888.575.6782 • TTY: 711



ADAMS CAMPUS
401 North Main
Adams, WI 53910

MARSHFIELD CAMPUS
2600 West 5th Street
Marshfield, WI 54449

STEVENS POINT CAMPUS
1001 Centerpoint Drive
Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS
500 32nd Street North
Wisconsin Rapids, WI 54494

CAREER PATHWAY • BEGIN AT ANY POINT

HIGH SCHOOL STUDENT

COLLEGE TRANSFER

RETURNING ADULT

CREDIT FOR PRIOR LEARNING AND EXPERIENCE

CREDIT FOR PRIOR LEARNING AND EXPERIENCE

- Certifications and Licenses
- High School Credit
- Military Experience
- National/Standardized Exams
- Transfer Credit
- Work and Life Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.

TECHNICAL DIPLOMA

CONSTRUCTION TRADES

Technical Diploma • 11 Credits

Start Your Career

- Electrical Contracting Laborer
- Carpentry Contracting Laborer
- Plumbing Contracting Laborer
- Apprenticeship

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) INSTALLER

Technical Diploma • 25 Credits

Start Your Career

- Building Controls Technician
- Heating, Ventilation, and Air Conditioning Installer
- Heating and Air Conditioning Mechanic
- Apprenticeship

ASSOCIATE IN APPLIED SCIENCE (AAS)

RENEWABLE ENERGY TECHNICIAN

Associate in Applied Science (AAS) • 61 Credits

Start Your Career

- Energy Load Estimator
- Renewable Energy Technical Sales Representative
- Solar Installer
- Apprenticeship

BACHELOR'S DEGREE

BACHELOR'S DEGREE OPTIONS

Arizona State University, Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), Northern Michigan University, University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governors University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

APPRENTICESHIP OPPORTUNITIES

- Carpenter Apprenticeship
- Construction Electrician (ABC) Apprenticeship
- Construction Electrician (IBEW-NECA) Apprenticeship
- Plumber Apprenticeship
- Steamfitter and Steamfitter Service Apprenticeship

PROGRAM OUTCOMES

Employers will expect you, as a Construction Trades graduate, to be able to:

- Demonstrate construction safety.
- Use construction tools and equipment.
- Interpret construction documents and blueprints.
- Construct a building structure using wood framing techniques.
- Recognize plumbing, HVAC, and electrical systems.
- Comply with all applicable standards, policies, and procedures, including safety procedures and the maintenance of a clean work area.

TECHNICAL SKILLS ATTAINMENT

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Construction Fundamentals course.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

GRADUATION REQUIREMENT

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

GPS for Student Success ☑

10890102 1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course is recommended to be completed prior to obtaining 12 credits and is a graduation requirement unless you receive an exemption from your program advisor.

ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

College Reading and Writing 1

10831104 3 credits

Provides learners with opportunities to develop and expand reading and writing skills to prepare for college-level academic work. Students will employ critical reading strategies to improve comprehension, analysis, and retention of texts. Students will apply the writing process to produce well-developed, coherent, and unified written work.

Pre-Algebra

10834109 3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

SAMPLE FULL-TIME CURRICULUM OPTION

Term		11 credit
10442117	Welding Fundamentals 1 ☑	1
10476171	Safety for Construction Trades ☑	1
10482107	Construction Fundamentals	2
10483121	Piping Applications	3
10601130	Blueprint Reading for Construction Trades	2
10601140	Electricity for the Construction Trades	2

Total credits 11

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

SAMPLE PART-TIME CURRICULUM OPTION

Term		4 credits
10442117	Welding Fundamentals 1	1
10476171	Safety for Construction Trades ☑	1
10482107	Construction Fundamentals	2

Term		7 credits
10483121	Piping Applications	3
10601130	Blueprint Reading for Construction Trades	2
10601140	Electricity for the Construction Trades	2

Total credits 11

COURSE DESCRIPTIONS

Blueprint Reading for Construction Trades

10601130.....2 credits

Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

Construction Fundamentals

10482107.....2 credits

Studies the concepts associated with the theory, materials, and methods used in construction, including footings and foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

Electricity for the Construction Trades

10601140.....2 credits

This course is an introduction to electrical theory and application for those in the construction and building trades. Content includes AC and DC circuits, schematics, Ohms law, multimeter use and circuit troubleshooting. This course will also provide an introduction to the contents of the National Electric Code (NEC).

Piping Applications

10483121.....3 credits

Presents the fundamentals of plumbing and piping installation practices. Laboratory activities provide students with basic pipe joining processes associated with the plumbing and HVAC industries.

Safety for Construction Trades

10476171 1 credit

The Safety for Construction Trades course teaches construction related workers about their rights, employer responsibilities and how to identify, abate, avoid and prevent job related hazards. Students will familiarize themselves with the proper selection and use of personal protective equipment and safety requirements on a construction site for various activities. Course outcomes align with the training outcomes recommended by OSHA. Upon successful completion, students will receive an OSHA 10 Card.

Welding Fundamentals 1

10442117 1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction paired with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.