

## ABOUT THE PROGRAM

The Construction Trades Fundamentals Pathway Certificate provides the needed knowledge and skills to start a career in the construction trades. Students will learn basic knowledge about various construction trades as well as how to work safely.

## PROGRAM OUTCOMES

- Demonstrate safety and proper use of materials, tools, and equipment
- Demonstrate proper use of hand and power tools
- Interpret construction documents and blueprints
- Demonstrate wood frame layout and assembly
- Recognize plumbing, heating, ventilating, air conditioning and electrical systems

## ADMISSIONS AND FIRST SEMESTER ENROLLMENT STEPS

- Submit online application.
- Complete the online Student Success Questionnaire.
- Schedule your 1st Time Program Counseling/Registration Session with your assigned program counselor to plan your first semester schedule, review your entire plan of study and discuss the results of the Student Success Questionnaire.

*\*Submit transcripts and test scores (optional, highly recommended): College transcripts, along with high school transcripts and test scores from within the last five years, used for course registration. Official transcripts needed for transferring college credit(s) and for financial aid purposes.*

## FUTURE SEMESTER ENROLLMENT STEPS

- Complete online Student Success Tutorial prior to registering for second semester.

## APPROXIMATE COSTS

- \$146.20 per credit tuition (WI resident) plus \$8.77 per credit student activity fee. Material fee varies depending on course. Other fees vary by program. Visit [gotoltc.edu/financial-aid/tuition-and-fees](http://gotoltc.edu/financial-aid/tuition-and-fees) for details.

## CONTACT

LTC Admissions Advisor  
 920.693.1162 • [Admissions@gotoltc.edu](mailto:Admissions@gotoltc.edu)

Catalog No. Class Title

Credit(s)

## COURSES

|          |                                             |   |
|----------|---------------------------------------------|---|
| 10410101 | Introduction to Construction                | 2 |
| 10413105 | Basic Electricity for Construction Trades   | 2 |
| 10410102 | Blueprint Reading for Building Construction | 2 |
| 10804107 | College Mathematics                         | 3 |
| 10442100 | Welding Introduction                        | 1 |
| 10601110 | Mechanical Service Applications             | 3 |

**TOTAL 13**

*Curriculum and program acceptance requirements are subject to change. Program start dates vary; check with your program counselor for details. The tuition and fees are approximate based on 2023-2024 rates and are subject to change prior to the start of the academic year.*

**BASIC ELECTRICITY FOR CONSTRUCTION TRADES**...provides practical DC/AC concepts to introduce various components, electrical quantities, and measuring values in DC and AC circuits. Circuit measurement of voltage, current, and resistance will be taken with analog and digital meters applying basic concepts. The student will learn about electrical theory, electrical safety, basic circuit design, measuring equipment, general wiring practices, motors, and transformers.

**BLUEPRINT READING FOR BUILDING CONSTRUCTION**...provides instruction in reading and interpreting shop drawings, residential drawings, and commercial building plans. Emphasis is placed on building terminology and learning conventional techniques of communicating building methods from the designer to the builder. Students learn to visualize the structure and to interpret elevations, plan views, details, and sections from drawings. They also learn to read and interpret building specifications.

**COLLEGE MATHEMATICS**...is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. **PREREQUISITE:** 10834109 Pre-Algebra or Math placement assessment equivalent

**INTRODUCTION TO CONSTRUCTION**...provides the learner with an overview of the various construction trades including framing, roofing, masonry block work, masonry flat work, electrical, HVAC, plumbing, and finish cabinetry work.

**MECHANICAL SERVICE APPLICATIONS**...students will learn and apply skills related to mechanical applications regarding hand and power tools, brazing, black pipe, PVC, Pex, electrical conduit, and basic sheet metal for flashing and ducts.

**WELDING INTRODUCTION**...introduces the learner to the world of welding, weld shop safety practices, welding terminology, and welding machine setup to industry standards. Learners will be introduced to the three major welding processes: SMAW, GMAW, and GTAW and will build skills welding with each process in the flat and horizontal positions while using the common welding joints found in industry. The learner will process material using the two major hand-held cutting processes - Oxyfuel and PAC.