

ENGINEERING, MANUFACTURING AND INDUSTRIAL TECHNOLOGY CONSTRUCTION TECHNOLOGY



PROGRAM LOCATION
LCC West Campus

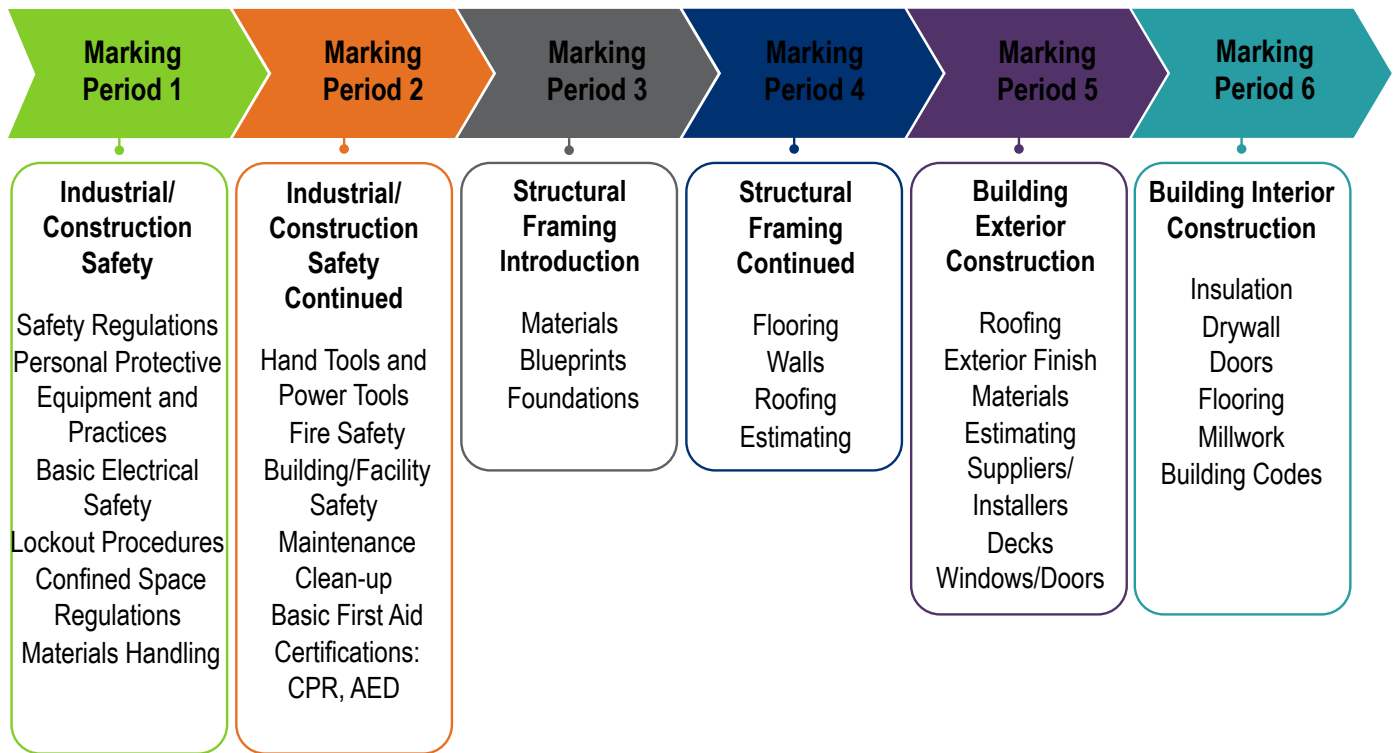
SESSION OFFERED
AM

AVERAGE LECTURE DAYS/WEEK
1-2 days

AVERAGE LAB DAYS/WEEK
3-4 days

HOMEWORK
Weekly

REQUIRED READING
College level textbooks & workbooks
Less than 10 pages/week



This program provides an overview of the construction industry by presenting information in several related areas. Students will begin the program in construction safety. Following this introduction, structural framing will be taught. Students will learn to frame residential buildings using accepted framing techniques; such as framing floor systems, interior and exterior walls, ceilings, roofs and stairs. Various types of foundations and the advantages and disadvantages of each are covered. Students will also learn how to install different roofing and siding materials plus learn to finish the interior of a residential building. This includes the materials, installation practices and material takeoff to do the finish carpentry for a house, including windows, doors, base, chair rail, wood floors, stairs and simple built-ins. If college level work is attained, students may earn up to 14 LCC credits.

EXPECTED STUDENT OUTCOMES

- Describe the scope and application of OSHA Regulations as it applies to construction worksites
- Describe the importance and use of personal protective equipment and practices
- Explain and demonstrate materials handling
- Explain and demonstrate the safe use of hand tools and small power tools
- Demonstrate knowledge of basic first aid
- Analyze various products, components and building materials; and determine where they will be used
- Read blueprints using standard symbols and abbreviations
- Identify and describe the various types of foundations
- Identify and install various types of floor systems
- Layout and assemble exterior and interior wall systems
- Identify and install various types of roofing systems and materials
- Plan, schedule, and estimate costs for multiple components of construction.
- Identify and install various exterior finish materials-vinyl siding, composite board, and asphalt shingles
- Design and construct exterior decks
- Identify/install/apply different forms of insulation
- Identify/install/finish drywall to walls and ceilings
- Identify and install various types of interior doors
- Identify and install various types of flooring
- Identify and install millwork.



**EXPLORE THE POSSIBILITIES.
FAST TRACK YOUR FUTURE.**

CAREERS

Building Inspector
Construction Manager
Contract Administrator
Cost Estimator
Field Engineer
Heavy Equipment Operator
Job Expeditor
Laborer
Project Manager
General Contractor

MEDIAN WAGE

\$29.94 hourly

EMPLOYMENT OUTLOOK

Average, 5-9%

CERTIFICATIONS

Home Builders Association of Michigan Certification
CPR
OSHA-10

SUCCESS INDICATORS

Safety conscious, have strong eye/hand coordination, focused, attentive, willing to follow directions, enthusiastic, motivated, have a good attitude and work ethic, and have a desire to learn.

STUDENT LEADERSHIP

Students have the opportunity for leadership, competition, and community service through membership in SkillsUSA.

14 COLLEGE CREDITS

DCTM 102 – Construction Safety
BLDT 120 – Structural Framing
BLDT 130 – Building Exterior Construction
BLDT 140 – Building Interior Construction

ACADEMIC RIGOR

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