### CONSTRUCTION MANAGEMENT TECHNOLOGY

#### **Applied Science and Engineering Technology Division**

The associate of applied science degree with specialization in construction management technology is designed to provide individuals with a sound background for rewarding careers in the construction industry. The program is structured to provide training in both the technical and business components of this industry. Technical courses examine the materials, processes and systems used in construction. The business courses teach basic business practices and computer skills.

#### **Career Opportunities**

The program will be valuable for students seeking entry-level positions, as well as individuals who are currently in the construction field seeking to enhance their employment opportunities. Graduates of the program will have sufficient knowledge of the construction process to make a valuable contribution in both the field and office environment.

They will be prepared for entry-level employment in the following areas:

- · Architectural drafter
- · Assistant construction superintendent
- Construction inspector
- · Construction supervisor
- Estimators
- · Land planning technician/Surveying technician
- · Materials sales engineer
- Quality control technician
- Specifications writer trainee
- · Structural engineering technician

#### **Transfer Information**

Although this program is a two-year occupational program designed to prepare students for employment, four-year colleges and universities may accept much of this curriculum in transfer. Construction management students who wish to pursue the 3+1 transfer program to Eastern Michigan University are advised to meet with a program faculty member for alternate course selections before registering for classes.

For information regarding transfer opportunities for this, or any program, please visit the Transfer section of the MCCC website.

Note: The following codes identify courses that satisfy MCCC's General Education Requirements:

- (C1) GE Natural Sciences Competency
- (C2) GE Mathematics Competency
- (C3) GE Writing Competency
- (C4) GE Computer Literacy Competency
- (C5) GE Human Experience Competency
- (C6) GE Social Systems Competency

|      |   | Credits |
|------|---|---------|
| Requ | ired General Education Courses                    | 21      |
| C1   | PHY 101 (Technical Physics)                       |         |
|      | or PHY 151 (General Physics I)                    |         |
|      | or CHEM 150 (Fundamental Principles of Chemistry) |         |
|      | or CHEM 151 (General College Chemistry I)         | 4       |
| C2   | MATH 124* (Technical Mathematics II)              |         |
|      | or competency                                     | 4       |
| C3   | ENGL 151 (English Composition I)                  |         |
| C4   | MDTC 160 (Mechanical Drafting and CAD I)          |         |
| C5   | Expressions of the Human Experience Competency    | 3       |
| C6   | Social Systems Competency                         | 3       |

See the General Education Requirements on page 33 or the college website (www.monroeccc.edu) for a list of courses that satisfy the General Education Learning Competencies.

| Required Core Courses  | Credits<br>45 |
|--|---------------|
| 1st Semester MATH 119* (Elementary Technical Mathematics) CONM 100 (Introduction to Design and Construction) CONM 101 (Materials of Construction) MDTC 160 (Mechanical Drafting & CAD I) | 3             |
| 2 <sup>nd</sup> Semester  CONM 102 (Construction Practices)  |               |
| Summer Semester CONM 107 (Surveying)   | 3             |
| 3rd Semester  CONM 160 (Green Building and LEED® Rating System)  METC 220 (Statics & Strength of Materials)  | 4             |
| 4th Semester  CONM 105 (Mechanical Building Systems)  CONM 240 (Construction Planning and Scheduling with Primavera)  ACCT 151 (Accounting Principles)                                   | 3             |
| Total Degree Requirements  | 66 credits    |

\* MATH 119 (Elementary Technical Mathematics) and MATH 124 (Technical Mathematics II) are required for students whose goal is to complete the associate of applied science degree and seek employment. MATH 157 (College Algebra) and MATH 159 (Trigonometry and Analytical Geometry) are recommended for students interested in transferring to a four-year institution. Other MATH courses may be selected for transfer depending on the student's choice of transfer institution. Students interested in transfer are encouraged to seek the assistance of a faculty advisor or admissions counselor.

81-82 minimum billable

contact hours

**Total Degree Cost** 

# Certificate Program: Construction Management Technology

In addition to the two-year associate degree program, Monroe County Community College offers two certificate program options in construction management technology. We recognize that many employers place value on a certificate, which authenticates specialized educational preparation. The programs concentrate upon core courses with skill development and job upgrading being the primary objectives. All courses taken in the certificate programs are applicable toward one of the associate of applied science degrees.

## Option 1: Residential and Light Commercial Construction

The residential and light commercial construction certificate is for students who have limited construction background. The courses develop the basic skills necessary to gain entry-level employment with residential and light commercial contractors.

|  | Credits |
|--|---------|
| CONM 100 (Introduction to Design and Construction) | 3       |
| CONM 101 (Materials of Construction)               | 3       |
| CONM 102 (Construction Practices)                  | 3       |
| CONM 103 (AutoCAD and Residence Drafting)          | 4       |
| CONM 105 (Mechanical Building Systems)             | 4       |
| CONM 107 (Surveying)                               | 3       |
| CONM 110 (Construction Blueprint Reading)          |         |
| CONM 202 (Construction Safety)                     | 3       |
| MDTC 160 (Mechanical Drafting & CAD I)             | 4       |

Total Certificate Requirements
Total Certificate Cost

30 credits 41 minimum billable contact hours

#### **Option 2: Heavy and Industrial Construction**

The heavy and industrial construction certificate is designed for more experienced construction personnel who wish to upgrade skills to gain management positions with large industrial employers.

|   | Credits |
|---|---------|
| CONM 110 (Construction Blueprint Reading)         | 3       |
| CONM 202 (Construction Safety)                    | 3       |
| CONM 240 (Construction Planning & Scheduling with |         |
| Primavera)  | 3       |
| CONM 242 (Construction Documents & Law)           | 3       |
| CONM 244 (Construction Estimating)                | 3       |
| CONM 107 (Surveying)                              |         |
| MDTC 160 (Mechanical Drafting & CAD I)            |         |

Total Certificate Requirements
Total Certificate Cost

22 credits 26 minimum billable contact hours