CONSTRUCTION TECHNOLOGY - CONSTRUCTION ENGINEERING MAJOR, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6170

Effective May 2023

Division of Engineering, Business and Information Technologies (http://catalog.lorainccc.edu/academic-programs/engineering-business-information-technologies/)

The construction engineering major is designed to provide students with the knowledge, cognitive skills and hands-on experience necessary for the competent performance in an entry-level construction position. Employment opportunities exist in a variety of residential and commercial construction companies. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

| Fall Semester | | Hours |
|-------------------------|---|-------|
| TECN 111 | TECHNICAL PROBLEM SOLVING | 3 |
| CNST 121 | CONSTRUCTION DOCUMENT READING | 3 |
| CNST 122 | INTRODUCTION TO CARPENTRY | 4 |
| MTHM 155 | TECHNICAL MATHEMATICS I | 4 |
| SDEV 101 | INTRODUCTION TO THE LCCC COMMUNITY ² | 1 |
| | Hours | 15 |
| Spring Semester | | |
| CNST 120 | INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING | 2 |
| CNST 123 | INTRODUCTION TO ELECTRICAL WIRING | 2 |
| EMCH 111 | STATICS FOR TECHNOLOGY 1 | 3 |
| EMCH 112 | ENGINEERING MATERIALS | 3 |
| ENGL 161 | COLLEGE COMPOSITION I | 3 |
| MTHM 156 | TECHNICAL MATHEMATICS II 1 | 4 |
| | Hours | 17 |
| Second Year | | |
| Fall Semester | | |
| CADD 111 | INTRODUCTION TO COMPUTER AIDED DRAFTING ³ | 2 |
| CNST 124 | INTRODUCTION TO PLUMBING | 2 |
| CNST 201 | SURVEYING ¹ | 3 |
| CNST 205 | CONSTRUCTION ESTIMATING ¹ | 3 |
| EMCH 211 | STRENGTH OF MATERIALS ¹ | 4 |
| Social Science Elective | | |
| | Hours | 17 |

Spring Semester

| | Total Hours | 61-63 |
|--------------------|---|-------|
| | Hours | 12-14 |
| Technical Elective | | 2-4 |
| PHYC 150 | GENERAL PHYSICS I 1 | 4 |
| ENGL 164 | COLLEGE COMPOSITION II WITH TECHNICAL TOPICS ¹ | 3 |
| ARTS 254 | HISTORY OF AMERICAN ARCHITECTURE | 3 |

1

Indicates that this course requires a prerequisite.

2

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3

Indicates that this course has a prerequisite or may be taken concurrently.

Technical Electives

| Code | Title | Hours |
|----------|--|-------|
| CNST 125 | INTRODUCTION TO FINISH CARPENTRY | 2 |
| CNST 126 | INTRODUCTION TO MASONRY | 2 |
| CNST 206 | CONSTRUCTION ESTIMATING II | 3 |
| CYBR 110 | FUNDAMENTALS OF INTERNET OF THINGS (IOT) | 4 |
| CNST 287 | WORK BASED LEARNING I - CNST | 1-3 |
| CNST 288 | WORK-BASED LEARNING II - CNST | 1-3 |
| CNST 289 | WORK-BASED LEARNING III - CNST | 1-3 |

Social Science Electives

| Code | Title | Hours |
|-----------|------------------------------|-------|
| HSTR 151G | CIVILIZATION I | 3 |
| HSTR 152G | CIVILIZATION II | 3 |
| HSTR 161 | UNITED STATES I | 3 |
| HSTR 162 | UNITED STATES II | 3 |
| HSTR 171G | THE WORLD SINCE 1900 | 3 |
| HSTR 252G | WOMEN IN WORLD HISTORY | 3 |
| HSTR 267G | AFRICAN AMERICAN HERITAGE | 3 |
| PLSC 156 | AMERICAN NATIONAL GOVERNMENT | 3 |
| PSYH 151 | INTRODUCTION TO PSYCHOLOGY | 3 |
| SOCY 151G | INTRODUCTION TO SOCIOLOGY | 3 |

Program Contact(s):

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For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/construction/associate-of-applied-science-in-construction-technology-construction-engineering/)

Program Learning Outcomes

- 1. Communicate effectively in a construction environment.
- 2. Apply math, science, and engineering, technology principles to solve problems in the field of construction.
- 3. Demonstrate professional and ethical behavior.
- 4. Perform construction tasks in a safe manor.
- 5. Demonstrate a sound understanding of the concepts of construction engineering technology and the technical skills needed for the successful employment in the field of construction.
- 6. Recognize the need to maintain currency in the construction design field.
- 7. Recognize problems in construction applications and develop appropriate solutions.
- 8. Use creativity in construction design.