

Civil and Environmental Technology

College of Lake County Grayslake · Vernon Hills · Waukegan · Online

Program Overview

Engineering, Math and Physical Sciences
Division, Room T102, (847) 543-2044
www.clcillinois.edu/credit/programs/civ.asp

CIVIL AND ENVIRONMENTAL TECHNOLOGY

(Associate in Applied Science) Plan 24VA

This program prepares students to work as entry-level technicians in the civil/environmental technology industry.

To complete an A.A.S., students must meet general requirements detailed in the current CLC catalog.

Visit www.clcillinois.edu/catalog/ (select Career Programs).

Required General Education Coursework 17-19

- ARC 228 History of Architecture **or**
- Humanities or Fine Arts Elective* 3
- CMM 111 Communication Skills **or**
- CMM 121 Fundamentals of Speech 3
- ECO 110 Economics for Business and Industry **or**
- GEG 240 Geographic Information Systems **or**
- Social Science Elective* 3
- ENG 120 Technical Composition **or**
- ENG 121 English Composition 3
- MTH 117 Technical Mathematics I **and**
- MTH 118 Technical Mathematics II
- OR
- MTH 122 College Algebra **and**
- MTH 123 Trigonometry
- OR
- MTH 144 Pre-calculus 5-7

Required Civil and Environmental Technology Coursework 43

- CAD 177 Civil Drafting 3
- CIV 111 Basic Surveying 4
- CIV 113 Construction Inspection and Safety 3
- CIV 131 GIS/GPS Applications for Civil and
Surveying Technology 3

- CIV 211 Land Surveying **or**
- CIV 216 Civil Surveying 4
- CIV 213 Site Planning and Design 3
- CIV 214 Civil Materials and Testing 3
- CMT 110 Introduction to the Built
Environment 1
- CMT 113 Construction Materials 3
- CMT 114 Introduction to AEC Computer
Applications 2
- CMT 117 Construction Methods 3
- EGR 121 Engineering Graphics 3
- EGR 216 Statics and Mechanics of
Materials for Technology 5
- Technical Electives (see below) 3

Additional Required Coursework 5

- PHY 121 General Physics I **or**
- PHY 123 Physics for Science and
Engineering I 5

Total Hours for A.A.S. Degree 65-67

Technical Electives

- BIO 120 Environmental Biology 4
- CAD 217 AutoCAD II 3
- CIV 215 Special Problems 3
- CMT 119 Specifications and Building Codes 3
- CMT 211 Job Scheduling and Control 3
- CMT 213 Construction Law and Documents 3
- CMT 214 Construction Estimating 3
- CMT 215 Construction Management 3
- ESC 126 Geology of Illinois 3
- ESC 224 Environmental Geology 3
- EWE 220 Cooperative Work Experience I . . 1-4
- EWE 270 Cooperative Work Experience II . 3
- HRT 216 Natural Areas Management 3
- WWW111 Mechanical and Electrical
Equipment 3
- WWW112 Fundamentals of Wastewater
Treatment 3
- WWW113 Basic Waterworks Operations . . . 3
- WWW114 Introduction to Water and
Wastewater Analysis 3

Typical Jobs

- Civil drafter
- Surveying technician
- Construction Inspector
- Quality Control

Grads spend time in the field, but can also get involved in transferring field data to drawings.

Salary Range *

\$26,100 - \$59,500

Job Outlook *

Overall employment of surveyors, cartographers, photogrammetrists and surveying and mapping technicians is expected to increase by 21 percent from 2006 to 2016, which is much faster than the average for all occupations.

Employers

- Surveyors
- Civil Engineering/
Consulting Firms
- City/Village Public Works
- County or State DOT
- Water and wastewater
treatment facilities

Transfer Schools

CLC has agreements with the following institutions:

- Purdue Calumet
- Southern Illinois University –
Carbondale

* Career information is based on data from the Bureau of Labor Statistics for the Chicagoland area.



Civil and Environmental Technology

SURVEYING AND CIVIL TECHNOLOGY (Certificate) Plan 24VF

This certificate is intended for students desiring technician level work primarily in surveying technology and civil drafting.

Potential employers include civil engineering firms, surveyors, public works agencies and construction firms. Graduates are qualified to work in surveying crews and/or working on site plans in CAD using surveying data collected from fieldwork.

Graduates from this program are qualified to sit for the American Congress of Surveying and Mapping (ACSM) Level I Survey Technician certification exam.

CAD 117	Introduction to AutoCAD	3
CAD 177	Civil Drafting	3
CMT 114	Introduction to AEC Computer Applications	2
CIV 111	Basic Surveying	4
CIV 131	GIS/GPS for Civil Engineering and Surveying Applications	3
CIV 211	Land Surveying	3
CIV 216	Civil Surveying	4
CMT 111	Construction Layout	3
MTH 117	Technical Mathematics I	3

Total Hours for Certificate 25

Note: Cooperative work experience may be substituted for one course upon approval of the department chair.

How to Register

Visit www.clcillinois.edu/credit/register for steps on how to register.

Student Interests

Civil and Environmental Technology students . . .

- Should be good at math
- Like to solve problems
- Enjoy being out of the office
- Like working on civil infrastructure projects, such as roads, bridges and utilities

This program is full of new technology and innovations that make it exciting, such as GPS (Global Positioning System), site layout with robotic total stations and LIDAR (Light Detection and Ranging).

Transfer Notes

Students in this program can pursue a two-year A.A.S. and get a job as a civil technician. They can also transfer to get a B.S. in Technology or Surveying if they wish to pursue the Professional Land Surveying option.

Many courses may apply towards a Bachelor in Science degree in engineering technology or surveying. Courses required for transfer vary by school and program. Students should consult with a program advisor to plan an individualized curriculum based on their specific needs.

Visit www.clcillinois.edu/info/transfer to learn more.

Contact Info

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