

# ENGINEERING & DRAFTING TECHNICIAN, CERTIFICATE

## Program Description

The one-year certificate prepares graduates for entry-level positions as engineering or drafting technicians. All courses in the certificate are found in the Civil Engineering & Surveying Technology, AAS degree.

## Program Outcomes

Students who successfully complete the Completion Certificate as an Engineering & Drafting Technician will:

1. Participate effectively as a member of a technical team
2. Utilize modern measurement technologies to acquire spatial data
3. Demonstrate functional use of 3D computer-aided drafting and design software used for a variety of drawing techniques

## Career Considerations

Engineering and drafting technicians work with and provide technical support to licensed architects, engineers and surveyors. Technicians prepare design drawings and assist with field work. Technicians utilize knowledge of building materials, engineering practices, and mathematics to complete detailed drawings and to collect or evaluate data in the field. Theory and principles of design and graphics are implemented under the direction of engineering or surveying staff.

## Program Course Requirements

Course	Title	Credits
<b>First Year</b>		
<b>First Term</b>		
DRF 112	Computer Aided Drafting I	3
ENGR 111	Engineering Orientation I	3
GIS 203	Digital Earth-Geospatial	4
WR 121Z	Composition I	4
<b>Credits</b>		<b>14</b>
<b>Second Term</b>		
COM 219	Small Group Discussion	3
DRF 113	Computer Aided Drafting II	3
ENGR 112A	Problem Solving and Tech Pt 1	2
GIS 234	GIS I-Intro to Geographic Info	4
MTH 111Z	Precalculus I Functions	4
<b>Credits</b>		<b>16</b>
<b>Third Term</b>		
CIV 214	CAD-Civil 3D-Virtual Design	3
ENGR 112B	Problem Solving and Tech Pt 2	1
ENGR 245	Engineering Graphics	3
GIS 235	GIS II Data Analysis-App	4
MTH 112Z	Precalculus II Trigonometry	4
SUR 161	Surveying I	4
<b>Credits</b>		<b>19</b>
<b>Total Minimum Credits</b>		<b>49</b>

## Advising Notes

- It is strongly recommended that students pursuing the AAS degree apply to the UCC Registrar's Office for award of the Pathways Certificates when the coursework is completed, since the certificates

are not automatically awarded. The pathway certificate increases employment opportunities

- MTH 112Z can be a corequisite with SUR 161
- See advisor for full list of prerequisites and options electives