

Civil Engineering Technician - Structural

Associate of Applied Science Degree: 10-607-5

Campus: Fond du Lac

Description

The Civil Engineering Technician - Structural program develops the knowledge and experience in planning and design skills to support the construction industry. Students apply computer-aided design and drafting (CADD) as it relates to architectural and related design. In addition to strong computer skills, students need strong math, spatial and analytical skills to meet the demands of the engineering coursework. (See the program outcomes.)

Graduates work for civil engineering firms, architectural firms, contractors, surveyors, municipalities and public utilities.

Program Outcomes

- Apply surveying procedures and utilization of surveying equipment in the measurement of distance, elevations and directions.
- Calculate the forces in a wood and steel truss and the stress and strain in structural members.
- Calculate the heat loss for a commercial building.
- Determine the cost of labor and materials for a commercial building.
- Determine the load bearing capacity of soils.
- Develop a set of construction drawings for a wood framed building.
- Develop a set of engineering construction drawings for a precast concrete building, a pre-engineered steel building, a structural steel building and a wood-pole building.
- Draw a land area plan incorporating a closed traverse and legal description.

Statewide Yearly Salary Range for Recent Graduates

\$28,598 - \$44,457

Admission Process

- Submit the college admission application.
- Submit the \$30 one-time fee.
- Submit high school/other official college transcripts.
- Take the college placement assessment (ACCUPLACER, ACT or other).
- Meet with an admissions specialist to determine the best course sequencing and prerequisites (required for this program).
- Check with Admissions if any additional steps are required.



Course Number	Course Title	Year	2009-2010					2010-2011			
			Cr.	S	F	W	P	S	F	W	P
Technical Studies Courses											
607-110	Civil Drafting Fundamentals	4									
607-112	Architectural Drafting	5									
607-114	Structural Drafting	4									
607-122	Mechanical Construction	3									
607-123	Construction Estimating	3									
607-131	Structural Analysis 1	3									
607-132	Structural Analysis 2	3									
607-135	Construction Surveying	3									
607-137	Site Investigation	3									
607-138	Soils	2									
607-150	Technical Problems	3									
607-176	AutoCAD 1	3									
General Studies Courses											
801-195	Written Communication	3									
801-196	Oral and Interpersonal Communication	3									
804-113	College Technical Math 1A	3									
804-114	College Technical Math 1B	2									
804-116	College Technical Math 2	4									
809-166	Introduction to Ethics: Theory and Application	3									
809-195	Economics	3									
809-199	Psychology of Human Relations (or)	3									
809-198	Introduction to Psychology										
Students must choose an additional six credits of electives.		6									
Total		69									
A Civil Engineering Technician - Structural Exit Assessment is a graduation requirement for this program.											
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;">Schedule a Course</div> <div style="border: 1px solid black; padding: 5px;">Academic Planner</div> </div>											
Institutional Requirements											
890-125	Student Success - take 1st semester										
103-159	Computer Literacy/Advanced Standing - take 1st semester										
890-130	Career Development - take 3rd semester										

Semester Codes: S - Summer F - Fall W - Winter P - Spring

For information on how program credits transfer to a four-year college, please visit us at www.morainepark.edu/academics/transfer.

For course descriptions, please visit our Web site at www.morainepark.edu.