

Civil Engineering Technology

ENGINEERING TECHNOLOGIES DEPARTMENT

Associate in Applied Science (A.A.S.) Degree

Civil Engineering Technology graduates find employment opportunities in the design, construction and inspection of airports, bridges, water treatment systems, dams, railroads and highway planning and maintenance. Specific job responsibilities include computer-aided design/drafting, material testing, site surveying and cost estimating. Students have several choices with this major. Students can earn the A.A.S. Degree in Civil Engineering Technology, or the Land Surveying Option. The emphasis in this program is on practical applications that provide students with skills that can be used on the job as civil engineering technicians.

Can students transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Many other four-year colleges and universities will apply some or all of the courses taken toward a bachelor's degree.

What will students learn if they study Civil Engineering Technology?

Students acquire a foundation in communications, calculations, and engineering principles along with the specifics of civil engineering. All technical courses provide a balance between theory and practice.

Are there any requirements students must satisfy before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate. Students must also have a grade of "C" or better in high school algebra II and geometry.

How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions. They can complete the Certificate in three semesters

Questions?

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CIVIL ENGINEERING TECHNOLOGY

Associate in Applied Science (A.A.S.) Degree - CIT.AAS

Below are required courses and recommended course groupings and sequences for program completion.

Courses may have prerequisite and corequisite requirements. Check course descriptions for details.

Courses	Credits	Requisites/Comments
<i>Semester I</i>		
MCT 101 Introduction to Technology	2	MAT 013 or passing score on the College's placement test. Corequisite(s): MAT 014
MAT 129A Precalculus Part A	2	Appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A and MAT 014B, or departmental approval. MAT 129 may be substituted for MAT 129A & MAT 129B.
ENG 121 English Composition I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
CIT 125 Construction Estimating	2	
MEC 123 Technical Graphics/CAD I	3	
_____ General Education Humanities Elective (GE HUM)		
OR		
_____ General Education Social Science Elective (GE SS)	3	
<i>Semester II</i>		
MAT 129B Precalculus Part B	2	MAT 129A or equivalent
ENG 122 English Composition II	3	A grade of "C" or better in ENG 121
CIT 105 Statics for Technicians	3	MCT 101, MAT 129A or MAT 129
CIT 126 Advanced Civil Drawing/CAD II	3	MEC 123
CIT 104 Construction Surveying I	3	MAT 129A or MAT 129
PED ___ Physical Education Elective	1	Students have the option of substituting Health Education Electives in place of the Physical Education Elective.
<i>Semester III</i>		
MAT 131A Analytic Geometry & Calculus I Part A	2	MAT 129 or MAT 129B or appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination or departmental approval. MAT 131 may be substituted for MAT 131A & MAT 131B.
PHY 123 General Physics I – Lecture (GE MST)	3	MAT 129 or MAT 129A/MAT 129B
PHY 125 General Physics I – Lab (GE MST)	1	MAT 129 or MAT 129A/MAT 129B
CIT 203 Strength of Materials	4	CIT 105
CIT 205 Construction Surveying II	3	CIT 104
CIT 216 Soil Mechanics	4	CIT 105
<i>Semester IV</i>		
MAT 131B Analytic Geometry & Calculus Part B	2	MAT 131A
PHY 124 General Physics II – Lecture (GE MST)	3	PHY 123
PHY 126 General Physics II – Lab (GE MST)	1	PHY 125
CIT 212 Water Resources Technology	4	MAT 129B or MAT 129 and CIT 105
CIT 218 Steel Design	3	CIT 203
CIT 219 Reinforced Concrete Design	3	CIT 203
CIT 260 Civil/Construction Design Project	2	CIT 203, CIT 205, CIT 125 Corequisite(s): CIT 212, CIT 217
Total Credits: 68		

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