**AS, Civil Engineering Technology**

**AS CIVL**

**Purpose**

The Associate in Science (AS) in Civil Engineering Technology program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Architecture and Construction fields. The content includes but is not limited to surveying, highway design, soils and foundations, photogrammetry, asphalt design, drainage and geology, concrete design, orientation to utilities, structural design, estimating, drafting, legal and ethical considerations, employability skills, leadership and human relations skills, health and safety, and supportive general education. Computer use is essential. Technical report writing, record keeping and mathematical computations are important aspects of this occupation.

**Program Structure**

This program is a planned sequence of instruction consisting of 63 credit hours in the following areas: 18 credit hours of General Education Requirements, 19 credit hours of Civil Engineering Technology Foundation Core Requirements, 24 or 25 credit hours of Advanced Core Requirements, and 1 or 2 Elective credits.

**Course Prerequisites**

***Many courses require prerequisites.*** Click on each course’s name in the list below to check for prerequisites, minimum grade requirements, and other restrictions related to the course. Students must complete all prerequisites for a course prior to registering for it.

**Graduation**

Students must fulfill all requirements of their program major after which, students must complete an application for graduation through the Office of the Registrar and enroll in the GRD 2000 course the semester in which they intend to graduate. Students must apply for graduation ***by the*** ***published deadline*** to be assured of final clearance for graduation, timely receipt of their diploma, and participation in the commencement ceremony.

**General Education Requirements: 18 Credit Hours**

ENC 1101 - Composition I - 3 credits

ENC 1102 - Composition II - 3 credits

SPC 1017 - Fundamentals of Speech Communication - 3 credits

**OR**

SPC 2023 - Introduction to Public Speaking - 3 credits

ECO 2013 - Economics I - 3 credits

 \*Gen Ed Mathematics (MAC 1105-College Algebra recommended to meet prerequisite requirements for MAC 1140- Pre-Calculus Algebra and MAC 1114 - Trigonometry) - 3 credits

\*\*Gen Ed Humanities (PHI 2100 – Logic: Reasoning and Critical Thinking recommended) - 3 credits

 \*Math course may be chosen from any courses listed in the Associate in Arts Degree General Education Program Guide, AA, under Mathematics.

\*\*Humanities course may be chosen from any courses listed in the Associate in Arts Degree General Education Program Guide, AA, under Humanities.

**Civil Engineering Technology, AS Degree Core Requirements: 43 or 44 Credit Hours**

**Foundation Courses: 19 Credit Hours**

BCN 1040 – Introduction to Sustainability in Construction - 3 credits

BCN 1272 – Blueprint Reading - 3 credits

BCN 2710 – Construction Procedures - 4 credits

BSC 1051C – Environmental Biology: Southwest Florida Ecosystems - 3 credits

EGS 1001 – Introduction to Engineering - 3 credits

ETD 1320 – Computer Aided Drafting - 3 credits

**Advanced Courses: 24 or 25 Credit Hours**

ETD 1103C – Engineering Graphics I - 4 credits

GIS 1040 – Geographic Information Systems (GIS) - 3 credits

GIS 1045 – Geographic Information Systems (GIS) Customization - 3 credits

**\***MAC 1140 – Pre-Calculus Algebra - 3 credits

\*MAC 1114 – Trigonometry - 3 credits

SUR 1100C – Surveying - 4 credits

SUR 2140C – Advanced Surveying - 4 credits

ETD 2930 - Special Topics/Capstone – Engineering Technologies - 1 credit

\*MAC 1147 – Pre-Calculus Algebra/Trigonometry - 5 credits can be taken as an alternate to MAC 1140 and MAC 1114 along with one extra elective credit.

**Civil Engineering Technology, AS Degree Elective Requirements: 1 or 2 Credit Hours**

**Electives may be taken from the following 1000 and 2000 level courses:**

ARC 1211 – Introduction to Architecture - 3 credits

ETD 1949 – Engineering Technology Internship I - 3credits

SLS 1301 – Career and Educational Exploration - 1 credit

SLS 1350 - Employability Preparation - 2 credits

SLS 1515 – Cornerstone Experience - 3 credits

MAC 2233 - Calculus for Business and Social Sciences I - 4 credits

STA 2023 - Statistical Methods I - 3 credits

OR

Any course with the following prefix: BCT, BCN or ETD

**Note:** For students who are transferring to a state university, it is recommended that the following electives be selected: MAC 2233 or STA 2023.

**Total Degree Requirements: 63 Credit Hours**

**Information is available online at:** [**http://www.edison.edu/academics/**](http://www.edison.edu/academics/) **or on the School of Business and Technology Home Page at:** [**http://www.edison.edu/sobt**](http://www.edison.edu/sobt)