**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.*** Check the description of each course 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 in order to be eligible for graduation. Students must indicate their intention to attend commencement ceremony, by completing the Commencement Form by the published deadline.

**General Education Requirements: 18 Credit Hours**

* [ENC 1101 - Composition I](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [ENC 1102 - Composition II](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**

* [SPC 1017 - Fundamentals of Speech Communication](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**

**OR**

* [SPC 2608 - Introduction to Public Speaking](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**

* [ECO 2013 - Principles of Macroeconomics](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* General Education Mathematics([MAC 1105](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt8959) College Algebra recommended to meet prerequisite requirements for [MAC 1140](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt4273) Pre-Calculus Algebra and [MAC 1114](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt8506) Trigonometry) **3 credits**
* General Education Humanities ([PHI 2100](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt4018) Logic: Reasoning and Critical Thinking recommended) **3 credits**

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

**Foundation Courses:  19 Credit Hours**

* [BCN 1040 - Introduction to Sustainability in Construction](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [BCN 1272 - Blueprint Reading](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [BCN 2710 - Construction Procedures](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **4 credits**
* [BSC 1051C - Environmental Biology: Southwest Florida Ecosystems](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [EGS 1001 - Introduction to Engineering](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [ETD 1320 - Computer Aided Drafting](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**

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

* [ETD 1103 - Engineering Graphics I](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **4 credits**
* [GIS 1040 - Geographic Information Systems (GIS)](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [GIS 1045 - Geographic Information Systems (GIS) Customization](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [MAC 1114 - Trigonometry](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits** **\***
* [MAC 1140 - Pre-Calculus Algebra](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits** **\***

**OR**

* ISC 1001C - Foundations of Interdisciplinary Science I, 3 credits

**OR**

* PHY 1020C - Fundamentals of the Physical World, 3 credits

**OR**

* STA 2023 - Statistical Methods I. 3 credit
* [SUR 1100 - Surveying](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **4 credits**
* [SUR 2140 - Advanced Surveying](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **4 credits**
* [ETD 2930 - Special Topics/Capstone-Engineering Technologies](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **1 credit**

**\***[MAC 1147](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt2388)  Pre-Calculus Algebra/Trigonometry - **5 credits** can be taken as an alternate to [MAC 1140](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt8740) and [MAC 1114](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633#tt5366) 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](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [ETD 1949 - Engineering Technology Internship I](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [SLS 1301 - Career and Educational Exploration](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **1 credit**
* [SLS 1350 - Employability Preparation](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **2 credits**
* [SLS 1515 - Cornerstone Experience](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits**
* [MAC 2233 - Calculus for Business and Social Sciences I](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **4 credits**

* [STA 2023 - Statistical Methods I](http://catalog.fsw.edu/preview_program.php?catoid=11&poid=688&returnto=633) **3 credits (if not taken above)**

**OR**

* Any course with the following prefix: BCT, BCN, EET, 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:** [**www.fsw.edu/academics/**](http://www.fsw.edu/academics/) **or on the School of Business and Technology Home Page at:**[**www.fsw.edu/sobt**](http://www.fsw.edu/sobt)

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