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| |  |  |  | | --- | --- | --- | | |  | | --- | | **Computer Programming and Analysis, AS** | |  |   **Purpose**  The Associate in Science (AS) in Computer Programming and Analysis program prepares students for further education and careers such as entry level programmers, programmer specialists, computer programmers, senior programmers, chief business programmers, programmer analysts, and information systems programmers.  The content prepares individuals to analyze business situations and to design, develop and write computer programs; to store, locate, and retrieve specific documents, data, and information; analyze problems using logic/analysis tools, code into computer language; test, monitor, debug, document and maintain computer programs.  This program is designed to help students obtain the skills needed to earn various industry-recognized certifications.  **Program Structure**  This program is a planned sequence of instruction consisting of 60 credit hours in the following areas: 18 credit hours of General Education Requirements, 36 credit hours of Program Requirements, and 6 credit hours of Electives.  The Computer Programmer Certificate and the Computer Programming Specialist Certificate are comprised of core courses in the AS Computer Programming and Analysis degree. These certificates can be earned before the student has earned the AS Computer Programming and Analysis degree.  **Course Prerequisites**  ***Many courses require prerequisites.*** Check the description of each course in the list below for prerequisites, minimum grade requirements, and other restrictions. Students must complete all prerequisites for a course prior to registering for it.  **Graduation**  Students must fulfill all requirements of their program 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=15&poid=1412&returnto=1327) **3 credits** * [ENC 1102 - Composition II](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * General Education Core Natural Sciences **3 credits** * General Education Core Humanities **3 credits** * General Education Core Mathematics (Recommended: [MAC 1105](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327#tt4711)  or [STA 2023](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327#tt6742) )**3 credits** * General Education Core Social Sciences (Students required by F.A.C. 6A-10.02413 to demonstrate Civic Literacy should take AMH 2020 or POS 2041)**3 credits**   **Program Requirements: 36 Credit Hours**   * [CGS 1100 - Computer Applications for Business](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) 1 **3 credits** * [CIS 2321 - Systems Analysis and Design](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 1000 - Introduction to Computer Programming](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 1822 - Internet Programming HTML](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 2800 - Java Programming](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 2823 - Advanced Microsoft Web Development](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits**   **or**  [COP 2830 - Internet Programming HTML II](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits**   * [CTS 1131 - Computer Hardware](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [CTS 1133 - Computer Software](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [MAN 2021 - Management Principles](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 2700 - Database Programming](http://catalog.fsw.edu/preview_program.php?catoid=15&poid=1412&returnto=1327) **3 credits** * [COP 2360 - C# Programming I](http://catalog.fsw.edu/preview_program.php?catoid=14&poid=1334&returnto=1177) **3 credits** * [COP 2362 - C# Programming II](http://catalog.fsw.edu/preview_program.php?catoid=14&poid=1334&returnto=1177) **3 credits**   **1** Students who have successfully completed CGS 2108 will have met the requirement for CGS 1100.    **Electives: 6 Credit Hours**   * Any 1000 or 2000 level course **3 credits** * Any 1000 or 2000 level computer course with a COP, CGS, CTS, CNT, CIS, CET, or CAP prefix **3 credits**     **Total Degree Requirements: 60 Credit Hours** | |