



**Bachelor of Applied Science in Computer Information Systems Technology
Program Development/Software Development Specialization**

Associate Degree Awarded 60 Credit hours		
An AS or AA degree from a Regionally Accredited Institution is required for admission into EFSC BAS programs		
General Education Credit Requirement		
Students entering the program with an Associate in Arts degree from a Florida state institution will receive credit for all 36 general education credits. Students entering the program with an AS degree, or an AA degree from an institution other than a Florida state institution may need to complete additional general education credits.		
Technical Elective Requirement		
Students entering the program with an Associate in Arts degree may need to complete additional Technical Electives. Technical Electives are 1000 and 2000 level courses in a computer-related area. Students entering the program with an AS degree may already have this requirement completed depending on the focus of their AS degree. 21 credits of Technical Electives are required.		
Math and Programming Requirements		
The courses below are required to obtain the BAS degree in Computer Information Systems Technology. Some students may have already completed these courses during their AA or AS degree. If not, they can be completed during the BAS program.		
STA 2023	Statistics Prerequisite: MAC 1105 - College Algebra or MGF 1106 - Topic in Math	3
COP 2334	Intro to C++ Prerequisite: COP 1000 -Intro to Programming	3
Common Required Core (complete all courses)		Credits: 12
GEB 3213	Foundations of Managerial Communications Prerequisite : ENC 1101- <i>Composition I</i> - with 'C' or higher)	3
ISM 3011	Introduction to Information Tech Management	3
ISM 4300	Information Systems Operations Management Prerequisite: ISM 3113 - <i>Info Systems Analysis &Design (Co-req ISM 3011 - Intro to Info Tech Mgmt)</i> OR ISM 4041 - <i>Emerging Information Technologies (Prereq ISM 3011 - Intro to Info Tech Mgmt)</i>	3
MAN 4504	Operational Decision Making	3

Program Dev/Software Dev Specialization Major Courses		Credits: 18
CEN 3024	Software Development 1 Prerequisites: COP 3330 - <i>Object Oriented Programming</i> Prerequisite - COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
CEN 4025	Software Development 2 Prerequisite: CEN 3024 - <i>Software Development 1 (see above)</i>	3
CEN 4802	Software Integration, Configuration, and Testing Prerequisite: CEN 3024 - <i>Software Development 1(See above)</i>	3
COP 3330	Object Oriented Programming Prerequisite: COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
COP 3530	Data Structures and Algorithm Analysis Prerequisite: COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i> OR COP 2800 - <i>Intro to Java Programming</i> Prerequisite: COP 1000 - <i>Principles of Programming</i> OR COP 1332 - <i>Visual Basic Programming</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
ISM 3324	Applications in Information Security Prerequisite: COP 3330 - <i>Object Oriented Programming</i> Prerequisite - COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
Program Development/Software Development Specialization		Credits: 9
COP 3703	Database Design/Architecture Prerequisites: COP 2700 - <i>Database Techniques</i> Prerequisite: CGS 2100 - <i>Microcomputer Applications</i>	3
COP 3813	Internet Programming Prerequisite: COP 3330 - <i>Object Oriented Programming</i> Prerequisite: COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
COP 4655	Application Development for Mobile Devices Prerequisite: COP 3330 - <i>Object Oriented Programming</i> Prerequisite: COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
COP 4849	Web Applications Programming Prerequisite: CTSC 1134 - <i>Network +</i> COP 2700 - <i>Database Techniques</i> Prerequisite: CGS 2100 - <i>Microcomputer Applications</i> COP 2822 - <i>Web Page Authoring</i> Prerequisite: CGS 2100 - <i>Microcomputer Applications</i> COP 3813 - <i>Internet Programming</i> Prerequisite: COP 3330 - <i>Object Oriented Programming</i> Prerequisite: COP 2334 - <i>Intro to C++</i> Prerequisite: COP 1000 - <i>Principles of Programming</i>	3
ISM 3113	Information Systems Analysis and Design Co-requisite: ISM 3011 - <i>Intro to Info Tech Mgmt</i>	3

ISM 4041	Emerging Information Technologies Prerequisite: ISM 3011 -Intro to Info Tech Mgmt	3
CEN 4949	Internship	3
Total Credits		120
<p>Note: Must show proficiency in a foreign language through two years in high school with a 'D' or better in all semesters, completion of the second level of a foreign language at the college level, or completion of a proficiency exam. Foreign language taken at the college level <i>does not</i> satisfy the General Education or Technical Concentration credits.</p>		
<p>Note: All prerequisites must be completed with a grade of "C" or higher</p>		
<p>Note: Students may earn the BAS/CTBS degree once, choosing one specialization from available tracks. If BAS graduates wish to take courses from another specialization within this degree, they may do so as a non-degree student. The official curriculum in the current online EFSC catalog supersedes this document. EFSC reserves the right to make changes in the online and printed versions of the curriculum as circumstances require. It is expected that the only changes will be the correction of errors and the inclusion of new courses and programs approved during the academic year.</p>		
<p>For additional information please contact Bachelor Advising at 321-433-7241, Bachelor@easternflorida.edu or visit easternflorida.edu/go/bachelors</p>		