

Information Technology

Information Technology (ITEC) is a baccalaureate degree major designed to prepare students for careers in a wide variety of work settings that rely on information technologies to accomplish organizational goals. According to ACM/IEEE, ITEC is an academic discipline that is concerned with issues related to advocating for users and meeting their needs within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies.

The ITEC curriculum is based on the latest version of the nationally recognized ACM/IEEE IT Computing Curricula for undergraduate degree programs. The curriculum recognizes that graduates must have good computing skills as well as an understanding of the principles and fundamentals of IT, including programming, networking, human computer interaction, databases, and web systems, and cybersecurity. Many courses require significant hands-on computer activities related to software applications, languages, tools, application programming interfaces, network and system administration, web application development and operations, mobile app development, and operation, etc. Students also choose a number of elective courses from an approved list to reflect their personal interests in IT professional careers.

Bachelor of Science Degree in Information Technology Requirements

Information Technology Major

Degree Requirements	Credit Hours
University Core Curriculum Requirements ¹	39
Require MATH 106 or MATH 108. Recommend PHIL 104 or PHIL 105, and ECON 113, PSYC 102 or SOC 108	
Foundation Course Requirements - ITEC 209, ITEC 216, ITEC 224, ITEC 225, ITEC 280 ²	15
Requirements for Major in Information Technology	54
Required Major Courses- ITEC 312, ITEC 314, ITEC 334, ITEC 335, ITEC 336, ITEC 365, ITEC 366, ITEC 370, ITEC 380, ITEC 404, ITEC 412, ITEC 495	36
Approved Major Electives (Note: 15 hours must be at the 300- or 400-level) ³	15
Cyber Security - ITEC 316, ITEC 335, ITEC 342, ITEC 415, ITEC 417, ITEC 460	
Network and System Administration - ITEC 327, ITEC 335, ITEC 411, ITEC 415, ITEC 417, ITEC 418	

Degree Requirements	Credit Hours
Web & Mobile App Development - ITEC 312, ITEC 403, ITEC 405, ITEC 422, ITEC 446	
Data Management - IST 345, IST 374, IST 470, IST 472, IST 473	
Applied Data Analytics - ITEC 371, ITEC 373, ITEC 374, ITEC 471, ITEC 472	
Additional Electives	15
Total	120

¹ Students may meet these requirements through an approved AA/AS degree from an accredited community college.

² Students may meet these requirements through an articulated approved AA/AS degree from an accredited community college.

³ Additional options are available to ITEC majors. Students should speak with an academic advisor for further information.

The Capstone Option

The Capstone Option is available to qualified students entering the ITEC degree program. More information about the Capstone Option can be found within the University Core Curriculum tab of the Undergraduate Catalog. The ITEC degree program has signed Program Articulation Agreements with several community college computing-related degree programs in order to facilitate the transfer of community college students to SIU. These agreements take full advantage of the Capstone Option for admission to the Bachelor of Science in ITEC.

Online Degree Completion

The Information Technology offers an online delivery option for place-bound or working students to complete a Bachelor of Science degree in ITEC completely online. The same curriculum requirements apply to both residential and online students. Refer to the department's website for details.

If you have questions about the ITEC degree program, contact the academic advisor 618-453-7281.

Information Technology Minor

The minor in Information Technology (ITEC) is offered to meet the demands of the 21st century. The ITEC minor introduces students to the study of information technology principles and skills to meet the needs of users within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies. Because of its broad appeal to disciplines requiring the use of information technology, the minor in ITEC is an excellent complement to any degree program, regardless of major.

The ITEC minor requires 15-18 credit hours that consists of two required and three or four elective courses. The courses required to complete this minor include ITEC 209 and ITEC 216. Because of diverse student backgrounds and demands, ITEC minor students can choose interests in Data Analytics and Management, Cybersecurity, Systems Analysis and Design, or Web and Mobile Application Development. Alternatively, ITEC minor students may select their own courses among the approved ITEC minor elective courses.

All prerequisites for these courses must be fulfilled prior to enrollment in each course. All courses for this minor must be completed with a grade of C or better. All students who wish to enroll in this minor must do so through the ITEC advisor.

Information Technology Minor

Degree Requirements	Credit Hours
Required	6
ITEC 209 Introduction to Programming ITEC 216 Information Security Fundamentals	
Elective Courses	9-12
Data Analytics and Management	
ITEC 334, ITEC 370, ITEC 371; One of ITEC 373, ITEC 374, ITEC 411, ITEC 418, or ITEC 471	
Cyber Security Interest	
ITEC 224, ITEC 316, ITEC 335; One of ITEC 440, ITEC 460, ITEC 461, or ITEC 465	
Systems Analysis & Design	
ITEC 334, ITEC 404, ITEC 412	
Web & Mobile Application Development	
ITEC 312, ITEC 336, ITEC 405, ITEC 422	

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Catalog Year Statement:

Students starting their collegiate training during the period of time covered by this catalog (see bottom of this page) are subject to the curricular requirements as specified herein. The requirements herein will extend for a seven calendar-year period from the date of entry for baccalaureate programs and three years for associate programs. Should the University change the course requirements contained herein subsequently, students are assured that necessary adjustments will be made so that no additional time is required of them.