INFORMATION TECHNOLOGY (BSIT)

Program Overview

The B.S. Information Technology (BSIT) program provides students with a combination of knowledge, hands–on experience, and application of theory to support their employment in the field of Information Technology. The curriculum emphasizes quantitative and communication skills as well as providing a basic foundation in understanding the business process and the role of Information Technology in supporting that process. The BSIT is available in person and 100% online.

Computer science and information technology graduates find jobs in a wide array of occupations including software engineering, application, game, and web programming, network administration and security, and database administration. Because computers are becoming more and more pervasive, computer science and information technology jobs are available in almost every field.

Career Opportunities

Business/Systems Analysts, Database Administrators, Network Manager, Network & Security Specialists

Program of Study

Code	Title	Credit Hours
Core IMPACTS Area : Institutional Priorities [1]		**4-5**
COMM 1110	Public Speaking	3
ITDS 1779	Scholarship Across the Disciplines	2
LEAD 1705	Introduction to Servant Leadership	2
PERS 1506	Perspectives 1-hour	1
PERS 1507	Perspectives 2-hour	2
Foreign Language Course Options		
ARAB, CHIN, FREN, GERM, GREK, ITAL, JAPN, KREN, LATIN, PORT, SPAN - 1001, 1002, 2001, 2002		
SWAH 1001	Elementary Swahili I	
SWAH 1002	Elementary Swahili II	
Core IMPACTS Area : Mathematics & Quantitative Skills [1]		**3-7**
DATA 1501	Introduction to Data Science	3
MATH 1001	Quantitative Skills and Reasoning	3
MATH 1101	Introduction to Mathematical Modeling	3
MATH 1111	College Algebra	3
MATH 1113	Pre-Calculus	4
MATH 1125	Applied Calculus	3
MATH 1131	Calculus with Analytic Geometry I	4
MATH 1132	Calculus with Analytic Geometry II	4
MATH 1165	Computer-Assisted Problem Solving	3
MATH 1401	Introduction to Statistics	3
MATH 1501	Calculus I	4
MATH 2125	Introduction to Discrete Mathematics	3
STAT 1401	Elementary Statistics	3
Core IMPACTS Area : Political Science and U.S. History		**6**
HIST 2111	U. S. History to 1865	3
or HIST 2112	U. S. History since 1865	
POLS 1101	American Government	3
Core IMPACTS Area : Arts, Humanities, and Ethics		**6**
Select one Fine Arts course		3
ARTH 1100	Art Appreciation	
ARTH 2125	Introduction to the History of Art I– Prehistoric through Gothic	
ARTH 2126	Introduction to the History of Art II– Renaissance through Modern	
MUSC 1100	Music Appreciation	
THEA 1100	Theatre Appreciation	
ITDS 1145	Comparative Arts [2]	
Select one Humanities course		3
ENGL 2111	World Literature I	
ENGL 2112	World Literature II	
ITDS 1774	Introduction to Digital Humanities	
PHIL 2010	Introduction to Philosophy	
ITDS 1145	Comparative Arts [2]	
Core IMPACTS Area : Communicating in Writing		**6**
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
Core IMPACTS Area : Technology, Mathematics, and Sciences [1]		**7-11**
ANTH 1145	Human Origins	3
ASTR 1105	Descriptive Astronomy: The Solar System	3
ASTR 1106	Descriptive Astronomy: Stars and Galaxies	3
ASTR 1305	Descriptive Astronomy Lab	1
ATSC 1112	Understanding the Weather	3
ATSC 1112L	Understanding the Weather Lab	1
BIOL 1125	Contemporary Issues in Biology Non-Lab	3
BIOL 1215K	Introductory Biology	4
BIOL 1225K	Contemporary Issues in Biology with Lab	4
CHEM 1151 & 1151L	Survey of Chemistry I and Survey of Chemistry I Lab	4
CHEM 1152 & 1152L	Survey of Chemistry II and Survey of Chemistry II Lab	4
CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry I Lab	4
CHEM 1212 & 1212L	Principles of Chemistry II and Principles of Chemistry II Lab	4
CPSC 1105	Introduction to Computing Principles and Technology	3
CPSC 1301K	Computer Science I	4
ENVS 1105	Environmental Studies	3
ENVS 1105L	Environmental Studies Laboratory	1
ENVS 1205K	Sustainability and the Environment	4
GEOG 2215	Introduction to the Geographic Information Systems	3
GEOL 1110	Natural Disasters: Our Hazardous Environment	3
GEOL 1121	Introductory Geoscience I: Physical Geology	3
GEOL 1121L	Introductory Geoscience I: Physical Geology Lab	1
GEOL 1122	Introductory Geo-sciences II: Historical Geology	3
GEOL 1322	Introductory Geo-sciences II: Historical Geology Lab	1
GEOL 2225	The Fossil Record	4

PHYS 1111 & PHYS 1311	Introductory Physics I and Introductory Physics I Lab	4
PHYS 1112 & PHYS 1312	Introductory Physics II and Introductory Physics II Lab	4
PHYS 1125	Physics of Color and Sound	3
PHYS 1325	Physics of Color and Sound Lab	1
PHYS 2211 & PHYS 2311	Principles of Physics I and Principles of Physics I Lab	4
PHYS 2212 & PHYS 2312	Principles of Physics II and Principles of Physics II Lab	4
Core IMPACTS Area : Social Sciences		**6**
Select one Behavioral Science course		
ECON 2105	Principles of Macroeconomics	
ECON 2106	Principles of Microeconomics	
PHIL 2030	Moral Philosophy	
PSYC 1101	Introduction to General Psychology	
SOCI 1101	Introduction to Sociology	
Select one World Cultures course		3
ANTH 1107	Discovering Archaeology	
ANTH 1105	Cultural Anthropology	
ANTH 2105	Ancient World Civilizations	
ANTH 2136	Language and Culture	
ENGL 2136	Language and Culture	
GEOG 1101	World Regional Geography	
HIST 1111	World History to 1500	
HIST 1112	World History since 1500	
ITDS 1155	The Western Intellectual Tradition	
ITDS 1156	Understanding Non-Western Cultures	
Core IMPACTS Total Hours		**42**
Health and Wellness		**3**
KINS 1106	Lifetime Wellness	2
or PHED 1205	Concepts of Fitness	
Select one PEDS course (https://catalog.columbusstate.edu/course-descriptions/peds/#peds)		

[1] The hours applied in the Institutional Priorities; Mathematics & Quantitative Skills; and Technology, Mathematics, and Sciences areas must add to 18 credit hours.

[2] ITDS 1145 Comparative Arts, though listed under both Fine Arts and Humanities, may be taken only once.

Major Requirements

Code	Title	Credit Hours
Core Requirements		
Complete the core requirements for this program		45
Core Total		45
Field of Study Requirements		
Minimum grade of C is required in each CPSC and CYBR course		
CPSC 1301K	Computer Science I	4
CPSC 1302K	Computer Science II (1 Credit Hour to Area G)	4
CPSC 2105	Computer Organization	3
CYBR 2159	Fundamentals of Computer Networks	3
CYBR 2160	Intro to Information Security	3
MATH 2125	Introduction to Discrete Mathematics (one hour to Area G)	3
Field of Study Requirements Total		18
Required for the Major		
Minimum grade of C is required in each BUSA, CPSC and MISM course		
BUSA 2100	Introduction to Information Systems in Business	3
CPSC 3118	Graphical User Interface Development	3
CPSC 3131	Database Systems I	3
CPSC 3165	Professionalism in Computing	2
CPSC 3415	Information Technology (IT) Practicum (take 3 times in 3 different approved subject areas)	3
or CPSC 4698	Internship	
CPSC 4205	IT Senior Capstone	3
CPSC 4000	Baccalaureate Survey	0
ENGL 5195U	Technical and Scientific Writing	3
MISM 3115	Principles of Information Systems Management	3
MISM 4165	Project Management	3
MISM 4168	Systems Analysis & Design	3
Math from Area A		1
1 Credit Hour from Area F CPSC 1302K		1
1 Credit Hour from Area F MATH 2125		1
Required for the Major Total		32
Major Electives		
Minimum grade of C is required in each course.		
CPSC/CYBR/ MISM/CYNX	Select 2 credits	2
CPSC/CYBR/ MISM/FTA/CYNX	Select 12 credits at the 3000 level or above	12
Major Electives Total		14
General Electives		
Select 14 credits, the following are recommended Courses for Business Minor: [1]		14
ACCT 2101	Principles of Accounting I	
BUSA 3135	International Business	
ECON 2106	Principles of Microeconomics	
MGMT 3115	Principles of Management	
MKTG 3115	Principles of Marketing	
General Electives Total		14
Total Credit Hours		**123**

[1] Note: Students are limited to no more than 30 credits of courses from the DATCoB with the following prefixes: ACCT/BUSA/MISM/ECON/ENTR/FINC/FTA/MGMT/MKTG.

Program Map

Course	Title	Credit Hours
First Year		
Fall		
ENGL 1101	English Composition I (minimum grade of C)	3

MATH 1113	Pre-Calculus (minimum grade of C)	4
Area B1	COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002	3
CPSC 1301K	Computer Science I (minimum grade of C)	4
KINS 1106 or PHED 1205	Lifetime Wellness or Concepts of Fitness	2
	Credit Hours	**16**
Spring		
ENGL 1102	English Composition II (minimum grade of C)	3
MATH 2125	Introduction to Discrete Mathematics (minimum grade of C)	3
CPSC 1302K	Computer Science II (minimum grade of C)	4
CPSC 2105	Computer Organization (minimum grade of C)	3
AREA C	Fine Arts Elective	3
Area B2	ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2)	1
	Credit Hours	**17**
Second Year		
Fall		
STAT 1401	Elementary Statistics (Area D course)	3
CYBR 2159	Fundamentals of Computer Networks (minimum grade of C)	3
BUSA 2100	Introduction to Information Systems in Business	3
AREA C	Humanities Elective	3
AREA D	Science Elective with Lab	4
	Credit Hours	**16**
Spring		
CPSC 3118	Graphical User Interface Development (minimum grade of C)	3
CYBR 2160	Intro to Information Security (minimum grade of C)	3
MISM 3115	Principles of Information Systems Management (minimum grade of C)	3
HIST 2111 or HIST 2112	U. S. History to 1865 or U. S. History since 1865	3
AREA E	Social Sciences Elective (World Culture)	3
CPSC 3415	Information Technology (IT) Practicum (minimum grade of C)	1
	Credit Hours	**16**
Third Year		
Fall		
CPSC 3165	Professionalism in Computing (minimum grade of C)	2
AREA I	General Elective	3
Area H	CPSC/CYBR/MISM Elective (minimum grade of C)	2
AREA E	Behavioral Science Elective	3
POLS 1101	American Government	3
CPSC 3415	Information Technology (IT) Practicum (minimum grade of C)	1
	Credit Hours	**14**

Spring		
CPSC 3131	Database Systems I (minimum grade if C)	3
Area H	CPSC/CYBR/MISM Upper-Division Elective (minimum grade of C)	3
Area W	PEDS Elective	1
AREA I	General Elective	3
ENGL 5195U	Technical and Scientific Writing	3
CPSC 3415	Information Technology (IT) Practicum (minimum grade of C)	1
	Credit Hours	**14**
Fourth Year		
Fall		
MISM 4168	Systems Analysis & Design (minimum grade of C)	3
AREA H	CPSC/CYBR/MISM Upper-Division Elective (minimum grade of C)	3
Area D	Science Elective with Lab	4
AREA I	General Elective	3
AREA I	General Elective	3
	Credit Hours	**16**
Spring		
CPSC 4205	IT Senior Capstone (minimum grade of C)	3
MISM 4165	Project Management (minimum grade of C)	3
CPSC 4000	Baccalaureate Survey	0
Area H	CPSC/CYBR/MISM Elective (minimum grade of C) [1]	3
Area H	CPSC/CYBR/MISM Elective (minimum grade of C) [1]	3
AREA I	General Elective	2
	Credit Hours	**14**
	Total Credit Hours	**123**

[1] Must be a pair of courses: CPSC 2125 Internet Programming-CPSC 4125 Server-Side Web Development or CPSC 3111 COBOL Programming-CPSC 3156 Transaction Processing or CYBR 3106 Cybersecurity Risk Management-CYBR 3119 Fundamentals of Digital Forensics.

Admission Requirements

There are no program specific admission requirements.

Additional Program Requirements

Students must earn a C or better in all WBIT, CPSC and MISM courses in Areas F, G, and H.