

# Sample Course of Study

## Information Science & Technology, B.S., with Concentration in Cybersecurity

ISAT BS Degree (w/Cybersecurity Concentration) 4-Year Example Course Plan - Credit Hrs Req'd: 120 (As shown in example below: 120-122 hrs)			
NOTE: This represents a typical 4-year course plan for the ISAT major with a Concentration in Cybersecurity, but this is one of many possible permutations. Specific courses and the semesters in which they are taken are determined in consultation with the student's academic advisor each semester. Students should use this example plan, in conjunction with their DegreeWorks report, to prepare their own course plan. Also, note that add'l prerequisite MATH courses may be needed depending on the student's math placement test score.			
Fall Semester	Cr.	Spring Semester	Cr.
<b>First Year</b>			
ISAT B102 Intro to HTML & CSS (Program Requirement)	3	ISAT B104 Comptr Programming Techniques, Practices, & Tools (Program Requirement)	3
MATH B115 Pre-Calculus (If necessary as prerequisite for later MATH courses; may fulfill GE Numerical & Analytical Reasoning requirement or Free Elective, as needed)	4	MATH B141 Calculus I (Program Requirement)	4
ENGL B101 Composition and Rhetoric (GE English Requirement)	3	ISAT B150 Intro to Computer Science	3
General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3	ENGL B102 Composition and Literature (GE English Requirement)	3
General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3	General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3
<b>Total Semester Hours</b>	<b>16</b>	<b>Total Semester Hours</b>	<b>16</b>
<b>Second Year</b>			
ISAT B145 Object-Oriented Programming I (formerly "Java Programming & Algorithmic Design I") (Program Requirement)	4	ISAT B146 Object-Oriented Programming II (formerly "Algorithm Design II") (Program Requirement)	4
ISAT B201 Intro to Computer Security (Required for ISAT Cybersecurity Concentration)	3	ISAT B207 Computer System Administration (Program Requirement)	3
ISAT B211 Digital Logic Design (Program Requirement)	3	ISAT B212 Intro to Computer Architecture (Program Requirement)	3
GE Natural Science Elective (with lab)	4	GE Natural Science Elective (Lab optional, as long as <i>other</i> Natural Science Elective is a 4-credit course with integrated lab or a 3-credit course taken with concurrent 1-credit lab)	3
General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3	STAT B240 Fundamentals of Probability & Statistics (Program Requirement; <b>STAT B240 is the preferred course</b> ; however if B240 is not offered, STAT B201 can be taken instead with dept. chair permission)	3
<b>Total Semester Hours</b>	<b>17</b>	<b>Total Semester Hours</b>	<b>16</b>
<b>Third Year</b>			
ISAT B320 Database Management Systems I (Major Requirement)	3	ISAT B321 Database-Driven Applications Development (Major Requirement)	3
MGMT B371 Principles of Management and Leadership (Major Requirement)	3	ISAT B416 Intro to Computer Networks (Major Requirement)	3
ISAT B350 Intro to Data Structures & Algorithms (Major Requirement)	3	ENGL B262 Introduction to Technical Writing (Program requirement, fulfills one GE Liberal Arts Elective)	3
General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3	General Education (GE) Elective (Liberal Arts, History, Fine Arts, Social/Behavioral Sciences, Speech, Foreign Language, Global Citizenship & Multicultural Understanding, REACH Act)	3
ISAT B317 Digital Forensics (Required for ISAT Cybersecurity Concentration)	3	ISAT B318 Ethical Hacking (Required for ISAT Cybersecurity Concentration)	3
<b>Total Semester Hours</b>	<b>15</b>	<b>Total Semester Hours</b>	<b>15</b>
<b>Fourth Year</b>			
ISAT B401 Information Security Principles (Required for Cybersecurity Concentration)	3	ISAT B470 Software System Process & Management (Major Requirement)	3
ISAT B437 Information Technology Project Management (Major Requirement)	3	ISAT B499 Internship (Major Requirement; students are responsible for finding internship or co-op assignment through searches, career fairs, etc.; if necessary, internship may be completed during any academic term at USCB — fall, spring, or summer.)	1-3
General Education (GE) Elective	3	GE Elective [if needed] or ISAT/CSCI/Free Elective	3
ISAT B415 Network Security <b>or</b> ISAT B455 Cryptography <b>or</b> ISAT B409 Special Topics (Cybersecurity Concentration Elective)	3	ISAT, CSCI, or Free Elective	3
		ISAT, CSCI, or Free Elective	3
<b>Total Semester Hours</b>	<b>12</b>	<b>Total Semester Hours</b>	<b>13-15</b>