### **B.S. INFORMATION SECURITY** (120 credits)

# Science, Mathematics and Computer Science Department Revised July 2022

#### A. **CORE REQUIRED** COURSES (39 Credits)

ENGL 160 Composition/Rhetoric (3)	RST 112 (3)	PHIL 113 (3)
ENGL 180 World Literature (3)	RST Elective (3)	PHIL Elective (3)
ENGL Elective (3)	Modern Language I (3)	Global History (3)
Fine Arts Elective (3)	Modern Language II (3) or	History Elective (3)
Social Science Elective (3)	Elective (3)	

### B. **REQUIRED MAJOR** COURSES (64 Credits)

# C. **SUGGESTED ELECTIVE** COURSES (choose 17 Credits)

CS 142 Programming in C++ (3) (F/S)	ASTR 250 The Solar System (3) (S)
CS 150 Object Oriented Programming (3) (F/S)	ASTR 260 Galaxies, Relativity and Cosmology (3) (S)
CS 242 Computer Architecture (3) (F/S)	MATH 213 Calculus III (4) (S)
CS 245 Computer Data Structures (3) (F/S)	MATH 219 History of Mathematics (3)(F-Odd years)
CS 250 Database and Applications (3) (S)	MATH 324 College Geometry (3) (F)
CS 322 Computer Networks (3) (F/S)	PHYS 112 Intro to Astronomy (3) (F)
CS 341 Analysis of Algorithms (3) (F-Odd years)	PHYS 304 + L General Physics II (4) (S)
CS 342 Principles of Compilers (3) (F-Even years)	CS 111 Problem Solving and the Computer (3) (F)
CS 344 Operating System Principles (3) (S-Even)	CS 241 Machine Language with Assembler (3)
CS 352 Web Applications/Development (3)(S-Odd)	CS 314 Math Models and Computer Techniques (3)
CS 490 Computer Science Capstone (3) (F)	CS 320 Software Engineering (3) (S)
INSC 410 Legal Issues in Info Security (3) (F-Odd)	CS 350 Computer Graphics (3) (S)
INSC 420 Intro to Computer Security (3) (F-Even)	CS 456 Intro to Programming Languages (3)
INSC 430 Network Security (3) (S-Odd)	CS 463 Intro to Numerical Methods (3)
INSC 440 Intro to Cryptography (3) (S-Even)	CS 483 Intro to Theory of Computation (3)
INSC 445 Security Policies & Implementations (3) (F-Even)	CS 498 Special Topics in Computer Science (3)
INSC 450 Digital Forensics (3) (S-Odd)	
*MATH 155 Statistics (3) (F/S, SI) or MATH 220	
MATH 211 Calculus I (4) (S)	
MATH 212 Calculus II (4) (F)	
MATH 322 + L Linear Algebra (3) (S)	
MATH 323 Theory of Numbers (3) (F-Odd)	
MATH 420 Discrete Mathematics (3) (F)	
PHYS 303 + L General Physics I (4) (F)	

Math Placement Test: all students must take this test unless they have AP or dual enrollment credits which meet **all** required courses for the major.

- < 40: must take MATH 095 before any other math course (credits do not count towards graduation)
- >40: eligible for MATH 155, MATH 160 (pre-requisite course for MATH 211)
- >75: eligible for all math courses including MATH 211 (Calculus I)

<sup>\*</sup>you may need to take MATH 095 prior to taking MATH 155 requirement depending on Math Placement Test

<sup>\*\*</sup> you may need to take MATH 095, MATH 160 prior to MATH 170 requirement depending on Math Placement Test

One or two semesters of required Modern Language depends on Foreign Language Placement Exam.

F: fall semester; S: spring semester; SI: summer I semester; SII; summer II semester; F/S: fall or spring semester