



BACHELOR OF INNOVATION in COMPUTER SECURITY SAMPLE PROGRAM

The following document is intended for student use only. It represents the suggested order and semesters in which students should take courses to graduate within 4 years. Since each student starts at a different level of mathematical ability this listing should only be considered a guide. Specific questions about the sample program should be directed to the Engineering Advisor at (719) 262-3427.

Please refer to the Bi CS Security Checklist for elective options and course prerequisites and corequisites.

Courses marked with an * are often available in the summer. Courses marked with ** are ONLY offered in that semester. Please check with the Engineering Advisor if you would like to take some of these courses during the summer. Please note that CS students may want to offload some of the heavier semesters, making up the hours by taking courses during the summer semester, and still graduate in 4 years.

FRESHMAN YEAR

FALL SEMESTER (16 credit hours)	SPRING SEMESTER (15 credit hours)
*MATH 135 Calculus I – 4 *C S 115 Principles of Computer Science – 3 **ENTP 100 Intro. to Entrepreneurship – 3 *ENGL 131 Rhetoric & Writing I – 3 ID101 COB/EAS Freshman Seminar (BYOB, ltechKnow, Mindsorms) - 3	*MATH 215 Discrete Mathematics – 3 *C S 145 Data Structures & Algorithms – 3 *C S 206 Programming in C – 3 **INOV 101 The Innovation Process – 3 *Cross Disciplinary Core – 3

SOPHOMORE YEAR

FALL SEMESTER (16 credit hours)	SPRING SEMESTER (15 credit hours)
Science (PES,Chem/Bio) with lab – 5 C S 208 Programming with UNIX – 2 C S 216 Computer Org. & Assembly Language – 3 **INOV 210 Tech. Writing, Proposals, and Presentations – 3 INOV 201 Innovation Team, Reporting & Analysis – 1 *Cross Disciplinary Core – 3	Science (PES,Chem/Bio) with Lab -5 C S 306 Object-Oriented Programming in C++ OR C S 302 Adv Object Tech Using C#/.NET.C# – 3 C S 291 System Admin. and Security – 3 **BLAW 201 Business and Intellectual Property Law – 3 INOV 202 Innovation Team, Reporting & Analysis – 1

JUNIOR YEAR

FALL SEMESTER (16 credit hours)	SPRING SEMESTER (17 credit hours)
*MATH 313 Intro. to Linear Algebra – 3 C S 472 Design & Analysis of Algorithms – 3 PAD 340 Public Admin. and Homeland Security – 3 INOV 301 Innovation Team, Reporting & Analysis – 1 *Cross Disciplinary Core – 6	ECE 3610 Engineering Probability & Stats – 3 C S 422 Computer Networks – 3 C S 330 Software Engineering – 3 C S 420 Computer Architecture I – 3 *Cross Disciplinary Core – 3 INOV 302 Innovation Team, Design & Research – 2

SENIOR YEAR

FALL SEMESTER (17 credit hours)	SPRING SEMESTER (15 credit hours)
**C S 450 Operating Systems I – 3 **C S 470 Computability, Automata & Formal Lang. – 3 **C S 491 Fundamentals of Computer/Network Security – 3 INOV 401 Innovation Team, Design & Research – 2 *Cross Disciplinary Core – 3 *Security Elective Course – 3	**C S 492 Applied Cryptography – 3 **C S 305 Ethical Implications of Computing – 1 INOV 402 Innovation Team, Design & Research – 2 PAD 440 Understanding Terrorism – 3 *Security Elective Course – 3 *Cross Disciplinary Core – 3