

# BACHELOR OF SCIENCE IN APPLIED CYBERSECURITY AND INFORMATION TECHNOLOGY

## Required Courses

Code	Title	Credit Hours
<b>Information Technology Core Requirements</b>		<b>(36)</b>
ITM 301	Introduction to Contemporary Operating Systems and Hardware I	3
ITM 303	Introduction to Contemporary Operating Systems and Hardware II	3
ITM 311	Introduction to Software Development	3
ITM 313	Introduction to Open Source Application Development	3
or ITM 312	Introduction to Systems Software Programming	
ITMD 321	Data Modeling and Applications	3
ITMD 361	Fundamentals of Web Development	3
ITMD 362	Human-Computer Interaction and Web Design	3
ITMD 411	Intermediate Software Development	3
ITMM 471	Project Management for Information Technology and Management	3
ITMO 340	Introduction to Data Networks and the Internet	3
ITMO 356	Introduction to Open Source Operating Systems	3
ITMT 330	Introduction to Information Systems and the IT Profession	3
<b>Cybersecurity Core Requirements</b>		<b>(27)</b>
ITMM 485	Legal and Ethical Issues in Information Technology	3
ITMS 418	Coding Security	3
ITMS 438	Cyber Forensics	3
ITMS 443	Vulnerability Analysis and Control	3
ITMS 448	Cyber Security Technologies	3
ITMS 458	Operating System Security	3
ITMS 478	Cyber Security Management	3
ITMS 483	Digital Evidence	3
ITMT 430	System Integration	3
<b>Cybersecurity and Information Technology Electives</b>		<b>(6)</b>
Select six credit hours from ITM, ITMD, ITMM, ITMO, ITMS, ITMT, or TECH courses		6
<b>Mathematics Requirements</b>		<b>(20)</b>
MATH 151	Calculus I	5
MATH 152	Calculus II	5
MATH 230	Introduction to Discrete Math	3
MATH 251	Multivariate and Vector Calculus	4
MATH 474	Probability and Statistics	3
<b>Natural Science and Engineering Requirements</b>		<b>(10)</b>
EG 225 and PHYS 200 are recommended		
See Illinois Tech Core Curriculum, section D		10
<b>Humanities and Social Sciences Requirements</b>		<b>(21)</b>
PSYC 301 is recommended		
See Illinois Tech Core Curriculum, sections B and C		21
<b>Interprofessional Projects (IPRO)</b>		<b>(6)</b>
See Illinois Tech Core Curriculum, section E		6
<b>Free Electives</b>		<b>(3)</b>
Select three credit hours		3
<b>Total Credit Hours</b>		<b>129</b>

## Bachelor of Science in Applied Cybersecurity and Information Technology

		Year 1	
Semester 1	Credit Hours	Semester 2	Credit Hours
ITM 301	3	ITM 303	3
ITM 311	3	ITM 313	3
MATH 151	5	MATH 152	5
Humanities 200-level Elective	3	Social Sciences Elective	3
		Natural Science or Engineering Elective	3
<b>14</b>		<b>17</b>	
		Year 2	
Semester 1	Credit Hours	Semester 2	Credit Hours
ITMD 361	3	ITMD 362	3
ITMD 411	3	ITMO 356	3
ITMT 330	3	ITMO 340	3
MATH 251	4	ITMS 478	3
Natural Science or Engineering Elective	4	MATH 230	3
		Natural Science or Engineering Elective	3
<b>17</b>		<b>18</b>	
		Year 3	
Semester 1	Credit Hours	Semester 2	Credit Hours
ITMD 321	3	ITMS 418	3
ITMM 471	3	ITMS 438	3
ITMS 443	3	ITMM 485	3
ITMS 448	3	MATH 474	3
Humanities Elective (300+)	3	I PRO Elective I	3
Social Sciences Elective (300+)	3		
<b>18</b>		<b>15</b>	
		Year 4	
Semester 1	Credit Hours	Semester 2	Credit Hours
ITMS 483	3	ITMT 430	3
ITMS 458	3	Cybersecurity Elective	3
Cybersecurity Elective	3	I PRO Elective II	3
Humanities Elective (300+)	3	Social Sciences Elective (300+)	3
Free Elective	3	Humanities or Social Sciences Elective	3
<b>15</b>		<b>15</b>	
<b>Total Credit Hours: 129</b>			