BACHELOR OF SCIENCE IN APPLIED CYBERSECURITY AND INFORMATION TECHNOLOGY

Required Courses

ricquired oodises					
Code	Title	Credit Hours			
Information Technology Core Requirements (36)					
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			
Cybersecurity Core Requirements		(27)			
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			
Cybersecurity and Information Technology Electives					
Select six credit hours from ITM, ITMD, ITMM, ITMO, ITMS, ITMT, or TECH courses					
Mathematics Requirements		(20)			
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			
Natural Science and Engineering R	equirements	(10)			
EG 225 and PHYS 200 are recomme	ended				
See Illinois Tech Core Curriculum, s	10				
Humanities and Social Sciences Re	(21)				
PSYC 301 is recommended					
See Illinois Tech Core Curriculum, s	21				
Interprofessional Projects (IPRO)	(6)				
See Illinois Tech Core Curriculum, section E					
Free Electives					
Select three credit hours					
Total Credit Hours		129			
Total Olean Hours		123			

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
	14		17
			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
	17		18
			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	IPRO Elective I	3
Social Sciences Elective (300+)	3		
	18		15
			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	IPRO Elective II	3
Humanities Elective (300+)	3	Social Sciences Elective (300+)	3
Free Elective	3	Humanities or Social Sciences Elective	3
	15		15

Total Credit Hours: 129