Double Owl Pathway of Study



Undergraduate Program Name: BS with a major in CyberSecurity (Institute for Cyber Workforce Development, Coles College of Business)

Academic Program Coordinator Contact Information: Herb Mattord, Department of Information Systems & Institute for Cyber Workforce Development

Graduate Program Name: Master of Science in Software Engineering, MSSWE (College of Computing and Software Engineering)

Academic Program Coordinator Contact Information: Paola Spoletini, Department of Software Engineering and Game Development

Course Pairs:

Pre-Double Owl Requirement				
CYBR Elective 1	CS 3305 Data Structures			
Double Owl Scholars will NOT take the following BS Cybersecurity courses:	In their place, Double Owl Scholars will take the following MSSWE courses:			
Required courses (2)				
CYBR Elective 2 (e.g., CYBR 3220 Global IS Project Management)	SWE 6623 Software Engineering			
CYBR Elective 3 (e.g., CYBR 3223 Software Acquisition and Project Management)	SWE 6633 Software Project Planning and Management			
Choose	e one elective			
Specialization (System Security Track) - CYBR 4853 Computer Forensics	SWE 6863 Software Engineering Ethics and Legal Issue			
Specialization (Cyber Crime Track) - CYBR 4305 Technology and Cybercrime	SWE 6863 Software Engineering Ethics and Legal Issue			
Specialization (Network Security Track)-CYBR 4893 Internet of Things: Application of Security	SWE 6823 Embedded Systems			

Pathway of Study (Double counted courses are in RED)

Year 1 - Fall (13 credits)	Credits		Credits	
		Year 1 - Spring (16 credits)		
ENGL 1101- Composition I [A1]	3	ENGL 1102- Composition II [A1]	3	
MATH 1113- Precalculus or Higher [A2]	3	MATH 1190- Calculus I [D1]	4	
U.S. History [E2]	3	ECON 1000- Contemporary Economic Issues [B1]	2	
CSE 1321- Programming & Problem Solving I	3	POLS 1101- American Government [E1]	3	
CSE 1321L- Programming & Problem Solving I LAB	1	CSE 1322- Programming & Problem Solving II	3	
		CSE 1322L- Programming & Problem Solving II LAB	1	
TOTAL	13	TOTAL	16	
Year 2 - Fall (16 credits)	Credits	Year 2 - Spring (16 credits)	Credits	
CSE 2300- Discrete Structures for Computing or MATH 2345 Discrete Mathematics	3	Arts and Culture [C2]	3	
General Education - (B2)	3	Science Process (STEM) [D2]	4	
ACCT 2101 (F) - Principles of Accounting	3	MATH 2332/ECON2300 (Area F)	3	
CYBR 3123- Hardware & Software Concepts	3	CYBR 3423- Operating Systems Concepts & Administration	3	
CYBR 3100 - Principles of Cybersecurity	3	CYBR 4323- Data Communications & Networking	3	
TOTAL	15	TOTAL	16	
	Apply	to Double Owl		
Year 3 - Fall (16 credits)	Credits	Year 3 - Spring (15 credits)	Credits	
CYBR 4423 - Linux/Unix Administration	3	World History [E3]	3	
Science Process (STEM) [D2]	4	CYBR Elective 1 of 3 CS 3305 - Data Structure	3	
CYBR 3210 - Client Systems Security	3	Literature of the World[C1]	3	
Free Elective (1 of 2)	3	CYBR 3300- Management of Cybersecurity in a Global Environment		
CYBR 3200 - Network Security	3	CYBR 4200 - Perimeter Defense	3	
TOTAL:	16	TOTAL:	15	
Year 4 - Fall (15 credits)	Credits	Year 4 - Spring (14 credits)	Credits	
CYBR 4220 - Server Systems Security	3	CYBR Elective (3 of 3) SWE 6633 Software Project Planning and Management	3	
CYBR Elective 2 of 3	3	CYBR Specialization course (2 of 3)	3	
SWE 6623 Software Engineering	3	SWE 6823 Embedded Systems	3	
CYBR 4330 - Incident Response and Contingency Planning	3	CYBR Specialization course (3 of 3)	3	
CYBR Specialization course (1 of 3)	3	CYBR 4810 - Cybersecurity (capstone)	3	
General Education - (E4)	3	Free Elective (2 of 2)	2	
TOTAL:	15	TOTAL:	14	
	Apply to	Graduate Program	I	
Year 5 - Fall (9 credits)	Credits	Year 5 - Spring (12 credits)	Credits	
SWE 6613 Requirements Engineering	3	SWE 6733 Emerging Software Engineering Processes	3	
SWE 6653 Software Architecture	3	SWE 6813 Web Service Engineering 3		
SWE 6673 Software Testing and Verification	3	Ŭ Ü		
	+	SWE 7903 Software Engineering Capstone		