

INFORMATION TECHNOLOGY & COMPUTER PROGRAMMING PROGRAM OF STUDY SEQUENCE

Community College Rend Lake College High School Wayne City High School

Cluster: Information Technology Pathway: Programming & Software Development Program of Study: Computer Programming CIP Code: 11.0201

Cluster: Information Technology Pathway: Programming & Software Development Program of Study: Computer & Information Systems Security CIP Code: 11.1003

(DC) = Dual Credit (WBL) = Work Based Learning * = Dual Credit Option not required for POS

**=Higher level math can be substituted for math requirement (DE) = Dual Enrollment Opportunity

Education Level	Grade	CTE/Degree Major Courses	English	Mathematics	Science	Social Studies/Sciences	Other Required Courses/ Recommended Electives
SECONDARY	9	-Keyboarding -Computer Concepts	-English I	-Algebra I	-Physical Science	- Civics/Geography	-P.E. -Health -Driver's Education
	10	-Computer Literacy I & II	-English II/Speech	-Geometry	-Biology I		-P.E.
	11		-American Lit/Gram III	-Algebra II		-American History	-P.E.
	12	-WBM 1220 Intro to HTML (DC)	-English IV or ENGL 1101 Rhetoric & Composition I (DC)	-MATH 1201 Technical Math or MATH 1107 Cont. College Math (DC) or MATH 1108 College Algebra (DC)**		-PSYC 2101 Intro to Psychology (DC)	-P.E. -Resource Management TOTAL 23 credits required for graduation

POSTSECONDARY (Courses included in Certificate programs Italicized)

PROGRAM	Computer Programming AAS Degree		IT Database Specialist AAS Degree		IT Security Specialist AAS Degree	
	CTE/Degree Major Courses	General Education Courses	CTE/Degree Major Courses	General Education Courses	CTE/Degree Major Courses	General Education Courses
13 (Fall)	-CSCI 1101 Intro to Computers -CSCI 1260 Intro to .NET Platform Programming -WBM 1220 Intro to HTML (DC)	-ENGL 1101 Rhetoric & Composition I (DC) -MATH 1108 College Algebra (DC)	-CNS 1210 Intro to Networks -CNS 1212 Hardware & Operating Systems -CSCI 1102 Intro to Computers w/ Business Applications	-ENGL 1101 Rhetoric & Composition I (DC)	-CNS 1210 Intro to Networks -CNS 1212 Hardware & Operating Systems -CSCI 1102 Intro to Computers w/ Business Applications	-ENGL 1101 Rhetoric & Composition I (DC)
13 (Spring)	-BUSI 1101 Intro to Business -WBM 1222 JavaScript Web Applications -CSCI 1255 MS Access Database -CSCI 1261 Mastering .NET Platform Fundamentals -CSCI 2100 Discrete Structures		-CNS 1234 Linux Networking -CNS 1231 Windows Professional -CNS 2260 Wireless LAN/WAN -CSCI 1255 Microsoft Access Database	-MATH 1201 Technical Math OR MATH 1107 Contemporary College Mathematics (DC)	-CNS 1207 Fund of Info Security -CNS 1231 Windows Professional -CNS 2260 Wireless LAN/WAN -CNS 1234 Linux Networking	-MATH 1201 Technical Math OR MATH 1107 Contemporary College Mathematics (DC)
14 (Fall)	-ACCO 1101 Prin of Fin Accounting OR OFTC 1233 Office Accounting -WBM 1223 Server Less Web Development -CSCI 1257 SQL Server Database Design -CSCI 1262 Adv .NET Platform Development	-PSYC 2101 Intro to Psychology (DC) -COMM 1101 Principles of Effective Speaking (DE)	-CNS 1232 Windows Server -CNS 1235 Linux Server -CSCI 1257 SQL Server Database Design	-PSYC 2101 Intro to Psychology (DC) -OFTC 1234 Communication in Tech Service (DE)	-CNS 1232 Windows Server -CNS 1235 Linux Server -CNS 2228 Hacking Techniques & Tools	-PSYC 2101 Intro to Psychology (DC) -OFTC 1234 Communication in Tech Service (DE)
14 (Spring)	-CSCI 1264 Mastering Web App Dev -CSCI 1280 Adv Database Systems -CSCI 1290 Special Programming Project OR COOP 1101 Cooperative Experience I (WBL) -CSCI 2209 System Analysis & Design -WBM 1224 Progressive Web Applications		-CNS 2200 Emerging Technologies -CSCI 1280 Advanced Database Systems -COOP 1101 Cooperative Education (WBL) -I Elective - Recommended... • CNS 1207 Fundamentals of Info Security • CSCI 2100 Discrete Structures • CSCI 2209 System Analysis & Design	-COMM 1101 Principles of Effective Speaking (DE)	-CNS 2200 Emerging Technologies -CNS 2231 Network Security Firewalls and VPNs -COOP 1101 Cooperative Education (WBL)	-COMM 1101 Principles of Effective Speaking (DE)

Stackable Credentials (Course Comparisons)

Courses	AAS Degrees			Certificates						
	Computer Programming	IT Database Specialist	IT Security Specialist	Programming with .NET Platform	Computer Networking	Cyber Security Specialist	Linux Networking	PC Maintenance	Windows	Microsoft User
ACCO 1101 Principles of Financial Accounting OR OFTC 1233 Office Accounting	X									
BUSI 1101 Intro to Business	X									
BUSI 1202 Employability Skills				X	X	X	X	X	X	X
COMM 1101 Principles of Effective Speaking	X	X	X							
CNS 1207 Fundamental of Information Security		Recommended Elective	X			X				
CNS 1210 Intro to Networks		X	X		X				X	
CNS 1212 Hardware & Operating Systems		X	X		X	X	X	X		
CNS 1231 Windows Professional		X	X			X		X	X	
CNS 1232 Windows Server		X	X			X			X	
CNS 1234 Linux Networking		X	X			X	X			
CNS 1235 Linux Server		X	X				X			
CNS 2200 Emerging Technologies		X	X							
CNS 2228 Hacking Techniques and Tools			X			X				
CNS 2231 Network Security Firewalls & VPNs			X			X				
CNS 2260 Wireless LAN/WAN		X	X		X					
CSCI 1101 Intro to Computers	X									
CSCI 1102 Intro to Computer w/ Business Apps		X	X							X
CSCI 1255 Microsoft Access Database	X	X								X
CSCI 1257 SQL Server Database Design	X	X								
CSCI 1260 Intro to .NET Platform Programming	X			X						
CSCI 1261 Mastering .NET Platform Fundamentals	X			X						
CSCI 1262 Advanced .NET Platform Development	X			X						
CSCI 1263 Microsoft Excel Spreadsheet										X
CSCI 1264 Mastering Web Application Development	X			X						
CSCI 1275 Microsoft PowerPoint										X
CSCI 1280 Advanced Database Systems	X	X								
CSCI 1290 Special Programming Project OR COOP 1101 Cooperative Education I (WBL)	X	X COOP 1101	X COOP 1101							
CSCI 2100 Discrete Structures	X	Recommended Elective								
CSCI 2209 System Analysis and Design	X	Recommended Elective								
CSCI 2243 Intermediate Microsoft Word										X
ENGL 1101 Rhetoric & Composition I (DC)	X	X	X							
MATH 1201 Technical Math (DC) OR MATH 1107 Contemporary College Math (DC)		X	X							
MATH 1108 College Algebra (DC)	X									
OFTC 1234 Communication in Tech Service		X	X							
PSYC 2101 Intro to Psychology (DC)	X	X	X							
WBM 1220 Intro to HTML (DC)	X									
WBM 1222 JavaScript Web Applications	X									
WBM 1223 Server Less Web Development	X									
WBM 1224 Progressive Web Applications	X									
ELECTIVE (1 Needed)		X								

~CSCI 1101 Intro to Computers can be substituted for CSCI 1102 and vice versa.

4-Year Articulation Agreements (Postsecondary 15-16)

- Southern Illinois University– Carbondale
 - Bachelor of Science Information Systems Technologies