Computer Programming and Development (A25590CP)

A.A.S. Degree (Part Time)

PROGRAM PLANNING GUIDE

Revised: Fall 2025

Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor.

Curriculum By Semester

			Hours Per Week		
			Class	Lab	Credits
FALL SEMESTER					
CSC	120	Computing Fundamentals I	3	2	4
CTI	110	Web, Pgm, and DB Foundations	2	2	3
NOS	110	Operating Systems Concepts	2	3	3
SPRING SEMESTER					
CSC	121	Python Programming	2	3	3
WEB	115	Web Markup and Scripting	2	3	3
		Mathematics Electives	3	2	3
SUMMER SEMESTER					
DBA	120	Database Programming I	2	2	3
CTI	120	Network & Sec Foundations	2	2	3
FALL SEMESTER					
ENG	111	Writing and Inquiry	3	0	3
		Programming Concentration Area	-	-	3
		Social and Behavioral Sciences Electives	-	-	3
SPRING SEMESTER					
CTS	115	Info Sys Business Concepts	3	0	3
		Programming Concentration Area	-	-	3
		English and Communication Electives	-	-	3
SUMMER SEMESTER					
CSC	227	Cloud Application Development	2	2	3
		Humanities & Fine Arts Elective	-	-	3
FALL SEMESTER					
CSC	154	Software Development	2	2	3
		Programming Concentration Area	-	-	6
SPRING SEMESTER					
		Major Elective	-	-	3
		Project Elective	-	-	3

GRADUATION REQUIREMENT: Option 1 & 2 **Credit Hours 64**

Registrar's Office Approved 4/9/25

Computer Programming and Development (A25590CP)

A.A.S. Degree (Part Time)

General Electives					
			Hours Per Week		
			Class	Lab	Credits
English and Communication Electives					
(choose 3 credit hours from the following courses)					
COM	110	Into to Interpersonal Communication	3	0	3
COM	120	Intro Interpersonal Com	3	0	3
COM	231	Public Speaking	3	0	3
Humanities and Fine Arts Electives					
(choose 3 credit hours from the following courses)					
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
PHI	240	Introduction to Ethics	3	0	3
Mathematics Electives					
(choose 3 credit hours from the following courses)					
MAT	121	Algebra/Trigonometry I	2	2	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
Social and Behavioral Sciences Electives					
(choose 3 credit hours from the following courses)					
ECO	151	Survey of Economics	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Prin of Macroeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	118	Interpersonal Psychology	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Computer Programming and Development (A25590CP)

A.A.S. Degree (Part Time)

Required Major Electives

Concentration Area (Select 1 option grouping below)

Option 1 - Java Programming (12 Credit Hrs, take in order listed)					
CSC	151	Java Programming	2	3	3
CSC	249	Data Structure & Algorithms	2	3	3
CSC	251	Advanced Java Programming	2	3	3
CSC	256	Software Quality Assurance	2	2	3

Option 2 - C++ Programming (12 Credit Hrs, take in order listed)					
CSC	134	C++ Programming	2	3	3
CSC	249	Data Structure & Algorithms	2	3	3
CSC	234	Advanced C++ Programming	2	3	3
CSC	256	Software Quality Assurance	2	2	3

Major Elective					
(choose a minimum of 3 credit hrs from the following courses)					
CSC	114	Artificial Intelligence I	2	3	3
CSC	122	Python Application Development	2	2	3
CSC	221	Advanced Python Programming	2	2	3
DBA	130	Intro to noSQL Databases	2	2	3
DBA	240	Database Analysis/Design	2	3	3

Project Electives					
(choose a minimum of 3 credit hrs from the following courses)					
CSC	289	Programming Capstone	1	4	3
WBL	111 MI	Work-Based Learning I-CSC	0	10	1
WBL	112 MI	Work-Based Learning I-CSC	0	20	2
WBL	113 MI	Work-Based Learning I-CSC	0	30	3
WBL	121 MI	Work-Based Learning II-CSC	0	10	1
WBL	122 MI	Work-Based Learning II-CSC	0	20	2
WBL	123	Work-Based Learning III-CSC	0	30	3

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. Contact your academic advisor or WBL faculty coordinator for verification. Students must have approval from the department head and pre register with the Computer Technologies Division office. As an alternative to CSC 289, three credit hours of Work-Based Learning can be taken. The Work-Based Learning work period may be taken as WBL 112, over two semesters as WBL-111 and WBL-112 or over one semester as WBL-113.