



CIS: Computer Programming A.S. Degree - C++ concentration

PART TIME

This program roadmap represents one possible pathway to complete the program. **Please see a counselor** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2024-25

GE Pattern: local AA/AS

Total Units: 60

First Year

Semester 1

9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISC 310	Introduction to Computer Information Science	3	
Req	CISP 300 ¹	Algorithm Design/Problem Solving	3	
GE	HCD 310	College Success	3	IIIb

Semester 2

6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE	MATH 300	Introduction to Mathematical Ideas	3	IIb MC
GE	ENGWR 300 / 480 ^H	College Composition	3	Ila WC

Second Year

Semester 3

7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 360 ¹	Introduction to Structured Programming	4	
Elec	CISW 300	Web Publishing	3	

¹ CISP 480 can be taken in place of CISP 300 and 360.

Semester 4

7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 350	Database Programming	3	
GE	MUFHL 308	Introduction to Music: Rock & Roll	3	I
GE		any PE activity course	1	IIIa

Third Year

Semester 5

7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 400	Object Oriented Programming with C++	4	
GE	POLS 301 / 481 ^H	Introduction to Government: United States	3	Va

CAREER PATH

Career Options:

Upon completion of this degree, students have the minimum qualifications for an entry-level programmer/developer.

Advising Notes:

- Students can substitute ESLW 340 for ENGWR 300/480.

Semester 68 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Elec	RUSS 401	Elementary Russian	4	
Elec	CISW 310	Advanced Web Publishing	4	

Fourth Year

Semester 77 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 430	Data Structures	4	
GE	HIST 308	History of World Civilizations, 1500 to Present	3	VI

Semester 89 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE	PHYS 310	Conceptual Physics	3	IV
GE	PSYC 300 / 480 ^H	General Principles	3	Vb
Elec	ARTNM 322	Beginning Digital Art	3	

^H honors courses

EXPLANATION OF CATEGORIES

Req	Required Core	A course that is required for this program
GE	General Education	A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement
Elec	Degree Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree

Graduation Requirement

A course that fulfills a specific graduation requirement which can be replaced by another course that meets the same graduation requirement.

- MC = Math Competency
- WC = Writing Competency