



# Computer Science A.S. Degree

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

8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 300 <sup>1</sup>	Algorithm Design/Problem Solving	3	
GE		any Area IIIb (Life Development Skills) course	2	IIIb
Elec		any elective course numbered 300-499	3	

### Semester 2

9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 360 <sup>1</sup>	Introduction to Structured Programming	4	
Req	MATH 400	Calculus I	5	IIb MC

<sup>1</sup> CISP 480 can be taken in place of CISP 300 and 360

## Second Year

### Semester 3

9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 400	Object Oriented Programming with C++	4	
Req	MATH 401	Calculus II	5	

### Semester 4

7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 310	Computer Architecture and Organization	4	
GE	ENGWR 300 / 480 <sup>H</sup>	College Composition	3	Ila WC

## Third Year

### Semester 5

7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 430	Data Structures	4	
GE		any Area Va (American Institutions) course	3	Va

### Semester 6

6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
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## TRANSFER PATH

### Potential Transfer Majors:

- Computer Science B.S.
- Computer Engineering B.S.
- Information Technology B.S.
- Management Information Systems B.S.
- Applied Computer Science B.S.
- Software Engineering B.S.
- Applied Science in Computer Science B.S.
- Mathematics in Computer Science B.S.
- Computer Security B.S.

This map prepares students for the A.S. degree. Additional major requirements and general education courses are needed for transfer. [See a counselor](#) to create an educational plan that prepares you to transfer.

### Potential Career/Options After Completing a Bachelor's Degree:

Career opportunities include

- Computer Scientist
- Programmer/Developer
- Application Development
- Graphics Software Engineer
- Data Science Developer
- Security Software Engineer
- Embedded Software Engineer
- Qualitative Product Researcher

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 440	Discrete Structures for Computer Science	3	
GE		any Area Vb (Social & Behavioral Sciences) course	3	Vb

## Fourth Year

### Semester 7

6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		any Area IV (Natural Sciences) course	3	IV
GE		any Area VI (Ethnic/Multicultural Studies) course	3	VI

### Semester 8

8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		any Area I (Humanities) course	3	I
GE		any Area IIIa (Physical Education) course	1	IIIa
Elec		any elective course numbered 300-499	3	
Elec		any elective course numbered 300-499	1	

#### 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

- Data Analyst
- Full Stack Software Engineer
- Ads Intelligence
- Engineer -Threat Intelligence Center
- Technical Designer
- Data & Applied Scientist
- Lead Animator
- .NET Developer
- Business Analyst
- Systems Analyst
- Database Administrator

### Advising Notes:

- Students can substitute ESLW 340 for ENGWR 300/480.
- This map starts with MATH 400 which has prerequisites. Please see a counselor to add in prerequisite, courses if needed.

### Other Notes to Students Preparing to Transfer:

- Additional coursework may be required. Work with a counselor and ASSIST.ORG to determine the courses needed for your goals.

### Honors Courses (H):

Students with a cumulative GPA of 3.2 or better who complete 15 or more units of Honors coursework earn an Honors Transfer Certificate and can take advantage of honors-to-honors transfer agreements with highly selective colleges and universities, both public and private.