Computer Science A.S. Degree

FULL 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 — 15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 300[1]	Algorithm Design/Problem Solving	3	
Req	MATH 400	Calculus I	5	IIb MC
GE	ENGWR 300 / 480[H]	College Composition	3	IIa WC
GE		any Area IIIb (Life Development Skills) course	2	IIIb
Elec		any elective course numbered 300-499	2	

Semester 2 — 15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 360[1]	Introduction to Structured Programming	4	
Req	MATH 401	Calculus II	5	
GE		any Area I (Humanities) course	3	I
GE		any Area IV (Natural Sciences) course	3	IV

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

Second Year

Semester 3 — 15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 400	Object Oriented Programming with C++	4	
Req	CISP 310	Computer Architecture and Organization	4	
GE		any Area Va (American Institutions) course	3	Va
GE		any Area Vb (Social & Behavioral Sciences) course	3	Vb
GE		any Area IIIa (Physical Education) course	1	IIIa

Semester 4 — 15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	CISP 430	Data Structures	4	
Req	CISP 440	Discrete Structures for Computer Science	3	
GE		any Area VI (Ethnic/Multicultural Studies) course	3	VI
Elec		any elective course numbered 300-499	3	

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
Elec		any elective course numbered 300-499	2	

- 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.