

Pre-Software/Computer Engineering: AA/AS Dual Degree Program Map

Example Course Sequence

AA/AS Dual Degree

Pre-Software/Computer Engineering

Catalog Year 2025-2026



Computing Technologies Pathway

This map is for students earning both the Associate in Arts (General Studies) and Associate in Science (Science & Engineering Technology) degrees. Completing both degrees together helps you meet prerequisite and general education requirements to transfer to a Florida public school for a Bachelor's degree in this major. Classes with the symbol help you explore this pathway.



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[Sample Questions](#)



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fsw.edu/pathways/computing

Semester 1

Course Code	Course Name	Credits	Notes
SLS 1515	CORNERSTONE EXPERIENCE	3	
ENC 1101	COMPOSITION I	3	
CHM 2025	INTRO TO COLLEGE CHEMISTRY	3	SEE ADVISOR IF YOU COMPLETED ONE YEAR OF HIGH SCHOOL CHEMISTRY
CHM 2025L	INTRO TO COLLEGE CHEMISTRY LAB	1	
MAC 1106	COMB. COLLEGE ALGEBRA/PRECALC	4	ALTERNATIVE: MAC 1105 (IF NOT ELIGIBLE FOR MAC 1106)

Example Semester 1 Credits: 14

Semester 2

Course Code	Course Name	Credits	Notes
MAC 1114	TRIGONOMETRY	4	ALTERNATIVE: IF MAC 1105 IN SEMESTER 1, TAKE MAC 1114 + MAC 1140
ENC 1102	COMPOSITION II	3	
CHM 2045	GENERAL CHEMISTRY I	3	ALTERNATIVE FOR FGCU ONLY: BSC 1010 OR GLY 1010C
CHM 2045L	GENERAL CHEMISTRY I LAB	1	ALTERNATIVE FOR FGCU ONLY: BSC 1010L OR GLY 1010C
COP 1000	INTRO TO COMPUTER PROGRAMMING	3	

Example Semester 2 Credits: 14

Semester 3

Course Code	Course Name	Credits	Notes
MAC 2311	CALCULUS W/ANALYTIC GEOMETRY I	4	
CORE HUM. WRI. INTEN.	CHOOSE HUM 2020, LIT 2000, OR PHI 2010	3	

Example Semester 3 Credits: 7

Example Academic Year Credits: 35

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Semester 4

Course Code	Course Name	Credits	Notes
MAC 2312	CALCULUS W/ANALYTIC GEOMETRY II	4	
PHY 2048	GENERAL PHYSICS I	4	
PHY 2048L	GENERAL PHYSICS I LAB	1	
COP 2800	JAVA PROGRAMMING	3	
SOCIAL SCI. / CIVIC LIT	CHOOSE AMH 2010, AMH 2020, OR POS 2041	3	

Example Semester 4 Credits: 15

Semester 5

Course Code	Course Name	Credits	Notes
IDS 2891	CREATIVE CAPSTONE	3	
PHY 2049	GENERAL PHYSICS II	4	
PHY 2049L	GENERAL PHYSICS II LAB	1	
HUMANITIES	ANY WRITING INTENS. HUMANITIES	3	
MAC 2313	CALC. W/ANALYTIC GEOMETRY III	4	

Example Semester 5 Credits: 15

Semester 6

Course Code	Course Name	Credits	Notes
ECO 2013	PRINCIPLES OF MACROECONOMICS	3	
STA 2023	STATISTICAL METHODS I	3	REQUIRED FOR FGCU ONLY
MAP 2302	DIFFERENTIAL EQUATIONS I	4	

Example Semester 6 Credits: 10

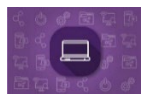
Example Academic Year Credits: 40

Total Required Credits: 75

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Transfer Worksheet



Computing Technologies Pathway

AA/AS Dual Degree

Pre-Software/Computer Engineering

Catalog Year 2025-2026

This worksheet shows degree and transfer requirements for this future major under the FSW Catalog and the Florida Common Prerequisite Manual. Three example bachelor's degrees are also listed for comparison, showing if the requirements are the same (X mark) or if there are alternative options or required substitutions.

✓	Category	Course Code	Course Name	Credits	Florida Gulf Coast University	University of Florida	University of South Florida
	FSW AA	SLS 1515	CORNERSTONE EXPERIENCE	3	X	X	X
	FSW AA	IDS 2891	CREATIVE CAPSTONE	3	X	X	X
	Communication	ENC 1101	COMPOSITION I	3	X	X	X
	Communication	ENC 1102	COMPOSITION II	3	X	X	X
	Humanities	Your choice	ANY CORE WRITING INTENSIVE HUMANITIES	3	X	X	X
	Humanities	Your choice	ANY WRITING INTENS. GEN. ED. HUMANITIES	3	X	X	X
	Social Science	Civic Lit.	CHOOSE AMH 2010, AMH 2020, OR POS 2041	3	X	X	X
	Social Science	ECO 2013	PRINCIPLES OF MACROECONOMICS	3	Alternative: Any Gen. Ed. S. Sci.	Alternative: Any Gen. Ed. S. Sci.	Alternative: Any Gen. Ed. S. Sci.
	Mathematics	MAC 1106	COMBINED COL. ALGEBRA/PRE-CALC.	4	X	X	X
	Mathematics	MAC 1114	TRIGONOMETRY	4	X	X	X
	Natural Sci.	CHM 2025	INTRO TO COLLEGE CHEM (SEE ADVISOR)	3	Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.
	Natural Sci.	CHM 2025L	INTRO TO COL. CHEM LAB (SEE ADVISOR)	1	Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.
	Natural Sci.	CHM 2045	GENERAL CHEMISTRY I	3	Alternative: BSC 1010 OR GLY 1010C	X	X
	Natural Sci.	CHM 2045L	GENERAL CHEMISTRY I LAB	1	Alternative: BSC 1010L OR GLY 1010C	X	X
	Gen. Ed. Flex	MAC 2311	CALCULUS W/ANALYTIC GEOMETRY I	4	X	X††	X
	Gen. Ed. Flex	MAC 2312	CALCULUS W/ANALYTIC GEOMETRY II	4	X	X††	X
	Elective/Prereq	COP 1000	INTRO TO COMPUTER PROGRAMMING	3	X	X	X
	Elective/Prereq	COP 2800	JAVA PROGRAMMING	3	X	X	X
	Elective/Prereq	MAC 2313	CALCULUS W/ANALYTIC GEOMETRY III	4	††	X††	X
	Elective/Prereq	MAP 2302	DIFFERENTIAL EQUATIONS I	4	X	X††	X
	Elective/Prereq	STA 2023	STATISTICAL METHODS I	3	X	Not required	Not required
	Elective/Prereq	PHY 2048	GENERAL PHYSICS I	4	X	X††	X
	Elective/Prereq	PHY 2048L	GENERAL PHYSICS I LAB	1	X	X††	X

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✓	Category	Course Code	Course Name	Credits	Florida Gulf Coast University	University of Florida	University of South Florida
	Elective/Prereq	PHY 2049	GENERAL PHYSICS II	4	X	X††	X
	Elective/Prereq	PHY 2049L	GENERAL PHYSICS II LAB	4	X	X††	X
	Only if required by test scores	ENC 1130	IMPROVING COLLEGE WRITING (COUNTS AS ELECTIVE)	3	Only if Needed	Only if Needed	Only if Needed
	Only if required by test scores	MAT 0057	MATHEMATICS FOR COLLEGE SUCCESS (DEVELOPMENTAL: DOES NOT COUNT AS ELECTIVE OR MATH)	4	Only if Needed	Only if Needed	Only if Needed
	Only if required by test scores	MAT 1033	INTERMEDIATE ALGEBRA (MUST EARN A TO AVOID EXTRA PREREQS; COUNTS AS ELECTIVE)	4	Only if Needed	Only if Needed	Only if Needed
	If less than A in MAT 1033	MAC 1105	COLLEGE ALGEBRA	3	Only if Needed	Only if Needed	Only if Needed
	If MAC 1105 was needed	MAC 1140	PRE-CALCULUS ALGEBRA	3	Only if Needed	Only if Needed	Only if Needed
	Civic Literacy Exam (FCLE)	REQUIRED TEST	Must Pass FCLE Exam to Graduate from FSW and any Florida Public School	N/A	X	X	X

Florida Gulf Coast University Notes

At FGCU this major is called Software Engineering. MHF 2191 (Mathematical Foundations) is not required for admission, but will be required to complete FGCU's Engineering Bachelor's Degrees. FSW students may take MHF 2191 as a transient student before transferring to FGCU. Talk to an Advisor. This is aligned with the 2025-26 FGCU Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.

University of Florida Notes

At UF this major is called Computer Engineering. Courses marked X†† may only be attempted a maximum of two times. This is aligned with the 2025-26 UF Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.

University of South Florida Notes

At USF this major is called Computer Engineering. This is aligned with the 2025-26 USF Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.

FSW Notes and Important Information

- **Note about Engineering majors:** Engineering is a broad pathway, with many different sub- categories. Different types of engineering may have additional prerequisites. Please refer to your future institution's program page or catalog to understand the prerequisites of the specific type of engineering you intend to pursue.
- Classes with the 💡 symbol help you explore this pathway.
- Students must meet all requirements in the FSW College Catalog, including Core, Writing Intensive, Civic Literacy, Foreign Language, and degree-specific rules. www.fsw.edu/academics/catalog
- Other classes may be used toward FSW degree requirements, but they might not meet the prerequisite and transfer requirements for your intended Bachelor's degree. Total credits for graduation may exceed the numbers indicated. Your Academic Advisor can help you make a personalized plan. www.fsw.edu/advising
- **IMPORTANT:** Schools may have additional transfer requirements not listed here, and prerequisite course requirements can change without notice. Always confirm transfer requirements directly with your destination schools and plan carefully and frequently with your Academic Advisor.
- To maintain timely graduation, it is highly recommended that you complete all common prerequisite course work prior to being admitted into a Bachelor's degree program. Some institutions may require that all prerequisites be completed before acceptance into the major.