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

Academic & Career Pathways
Florida SouthWestern State College

Example Course Sequence
AA/AS Dual Degree
PRE-SOFTWARE/COMPUTER ENGINEERING
CATALOG YEAR 2025-2026

COMPUTING TECHNOLOGY 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.

Learn about FSW's Computing Technology Degrees: fsw.edu/pathways/computing

MATH FAST LANE

Get to graduation sooner!

Take the AAF Math Placement Test at FSW Testing to see if you qualify for a fast track through your math courses!

Sample Questions:

Schedule Your Test:

Semester 1			
Course		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 CHEM LAB	1	
MAC 1106	COLLEGE ALGEBRA/PRECALCULUS	4	ALTERNATE: MAC 1105 IF NOT ELIGIBLE FOR MAC 1106
	Total Semester Credits:	14	

Semester 2			
Course		Credits	Notes
MAC 1114	TRIGONOMETRY	4	ALTERNATE: IF MAC 1105 IN SEM 1, TAKE MAC 1114 + MAC 1140
ENC 1102*	COMPOSITION II	3	
CHM 2045	GENERAL CHEMISTRY I	3	ALTERNATE: BSC 1010/L FOR FGCU OR UF
CHM 2045L	GENERAL CHEMISTRY I LAB	1	
COP 1000	INTRO TO COMPUTER PROGRAMMING	3	
	Total Semester Credits:	14	

Semester 3			
Course		Credits	Notes
MAC 2311	CALC W/ANALYTIC GEOMETRY I	4	
HUMANITIES*	ANY WRIT. INTENS. CORE HUMANITIES	3	CHOOSE HUM 2020, LIT 2000, OR PHI 2010
	Total Semester Credits:	7	
	Total Academic Year Credits:	35	

Semester 4			
Course		Credits	Notes
MAC 2312	CALC W/ANALYTIC GEOMETRY II	4	
PHY 2048	GENERAL PHYSICS I	4	
PHY 2048L	GENERAL PHYSICS I LABORATORY	1	
COP 2800	JAVA PROGRAMMING	3	
SOCIAL SCI. / CIVIC LIT.	CHOOSE AMH 2010, AMH 2020 OR POS 2041	3	
	Total Semester Credits:	15	

See important notes on Page 3

PRE-SOFTWARE/COMPUTER ENGINEERING PROGRAM MAP

Example Course Sequence

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Florida SouthWestern State College

Semester 5			
Course		Credits	Notes
IDS 2891	CREATIVE CAPSTONE	3	
PHY 2049	GENERAL PHYSICS II	4	
PHY 2049L	GEN PHYSICS II LAB	1	
HUMANITIES*	ANY WRITING INTENS. HUMANITIES	3	
MAC 2313	CALC W/ANALYTIC GEOMETRY III	4	
	Total Semester Credits:	**15**	

Semester 6			
Course		Credits	Notes
ECO 2013	PRINCIPLES OF MACROECONOMICS	3	
MAP 2302	DIFFERENTIAL EQUATIONS I	4	
	Total Semester Credits:	**7**	
	Total Academic Year Credits:	**37**	
	Overall Credits:	**72**	

See important notes on Page 3

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

Academic & Career Pathways
Florida SouthWestern State College

COMPUTING TECHNOLOGY PATHWAY

Transfer Worksheet
AA/AS Dual Degree
PRE-SOFTWARE/COMPUTER ENGINEERING
CATALOG YEAR 2025-2026

✓	Common Prerequisites & FSW Recommended Courses		Credits	Semester	Example Transfer Requirements** Florida Gulf Coast University	University of Florida	University of South Florida	Other Transfer School:
	FSW Cornerstone Experience and Creative Capstone							
	SLS 1515	CORNERSTONE EXPERIENCE	3		X	X	X	X
	IDS 2891	CREATIVE CAPSTONE	3		X	X	X	X
	Communication							
	ENC 1101*	COMPOSITION I	3		X	X	X	
	ENC 1102*	COMPOSITION II	3		X	X	X	
	Humanities							
	HUMANITIES*	ANY WRITING INTENS. CORE HUMANITIES	3		X	X	X	
	HUMANITIES*	ANY WRITING INTENS. HUMANITIES	3		X	X	X	
	Social Science							
	CIVIC LIT.	CHOOSE AMH 2010, AMH 2020, OR POS 2041	3		X	X	X	
	ECO 2013	PRINCIPLES OF MACROECONOMICS	3		Alternate: Any Gen. Ed. Social Science	Alternate: Any Gen. Ed. Social Science	Alternate: Any Gen. Ed. Social Science	
	Mathematics							
	MAC 1106	COMB. COLLEGE ALGEBRA/PRE-CALC	4		X	X	X	
	MAC 1114	TRIGONOMETRY	4		X	X	X	
	Natural Science							
	CHM 2025	INTRO TO COLLEGE CHEMISTRY	3		Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.	Work with Advisor to choose N.Sci.	
	CHM 2025L	INTRO TO COLLEGE CHEM LAB	1					
	CHM 2045	GENERAL CHEMISTRY I	3		Alternate: BSC 1010/L OR GLY 1010C	X	X	
	CHM 2045L	GENERAL CHEMISTRY I LAB	1					
	Electives / Gen. Ed. Flex							
	COP 1000 💡	INTRO TO COMPUTER PROGRAMMING	3		X	X	X	
	COP 2800	JAVA PROGRAMMING	3		X	X	X	
	MAC 2311	CALC W/ANALYTIC GEOMETRY I	4		X	X††	X	
	MAC 2312	CALC W/ANALYTIC GEOMETRY II	4		X	X††	X	
	MAC 2313	CALC W/ANALYTIC GEOMETRY III	4		X	X††	X	
	MAP 2302	DIFFERENTIAL EQUATIONS I	4		X	X††	X	
	PHY 2048	GENERAL PHYSICS I	4		X	X††	X	
	PHY 2048L	GENERAL PHYSICS I LAB	1		X	X††	X	
	PHY 2049	GENERAL PHYSICS II	4		X	X††	X	
	PHY 2049L	GEN PHYSICS II LAB	1		X	X††	X	
	Foreign Language, Dual Enrollment, and Other Requirements (If Needed)							
	ENC 1130†	IMPROVING COL. WRITING (COUNTS AS ELECTIVE)	3		Notes:	Notes:	Notes:	Notes:
	MAT 0057†	MATH FOR COL. SUCCESS (DEVELOPMENTAL: DOES NOT COUNT AS ELECTIVE OR MATH)	4		At FGCU this major is called Software Engineering.	At UF this major is called Computer Engineering.	At USF this major is called Computer Engineering.	
	MAT 1033†	INTERM. ALGEBRA (MUST EARN A TO AVOID ADDITIONAL PRE-REQS) (COUNTS AS ELECTIVE)	4		**STA 2023 is required in addition to courses listed.**	Courses marked X†† may only be attempted a maximum of two times.	This is aligned with the 2025-26 USF Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.	
	MAC 1105†	COLLEGE ALGEBRA (IF LESS THAN A IN MAT 1033)	3		This is aligned with the 2025-26 FGCU Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.	This is aligned with the 2025-26 UF Catalog. Admission and prerequisite requirements may change by the time you seek to enroll.		
	MAC 1140†	PRE-CALC. ALGEBRA (IF MAC 1105 WAS NEEDED)	3					
	Florida Civic Literacy Exam Requirement (FCLE) - Check if Satisfied							

- Classes with the 💡 symbol help you explore this pathway.
- Students must meet the Core, *Writing Intensive, Civic Literacy, Foreign Language, and College requirements in the FSW College Catalog.
- Other classes may be used toward FSW degree requirements, but they might not meet the prerequisite and transfer requirements for your indended Bachelor's degree.
- 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.
- Total credits for graduation may exceed the numbers indicated.
- Your Student Success Advisor can help you make a personalized plan. www.fsw.edu/advising

** The prerequisites for General Biology (BSC 1010/L) are (demonstration of readiness for college-level computation and communication) and (BSC 1005 or 1 credit of high school biology) with a "C" or better.

†Only take this class if required by test scores or other college placement requirements.

Updated 10/25

**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 carefuly and frequently with your Academic Advisor.