# **COMPUTER ENGINEERING (60 Credits)**

**Guided Pathway: Associate of Arts** 

**CONCENTRATION: Computer Engineering (FULL TIME).** 

For more information, visit <a href="https://www.fgc.edu">www.fgc.edu</a> and your academic advisor.

Meta-major: STEM

University Transfer: FAMU, FAU, FIU, FSU, UCF, UF, USF, UWF

The *Associate of Arts* degree is a collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs at the universities listed above<sup>ii</sup>. This plan is for those who are interested in earning a baccalaureate degree in *Computer Engineering*.

This is the sequence of courses for students interested in majoring in *Computer Engineering* at one of the universities listed above. It does not represent a contract, nor does it guarantee course availability or entry into your university of choice. This pathway presents classes needed for your baccalaureate degree in *Computer Engineering*. Courses that complete the degree are listed below. As always, visit your academic advisor each semester to help you keep on track for graduation.



# FULL-TIME Pathway

\*Note: All AA degrees must satisfy the Foreign Language requirement for graduation. Please see catalog\*

SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS

SEMESTER 1	ACTION ITEMS
ENC 1101 – Freshman Composition I iv (Communication core)	<ul> <li>Meet with your advisor to confirm academic and career goals by the end of the semester.</li> <li>REQUIRED: Complete the Computer Competency course within Canvas.</li> <li>Signup for and pass the Florida Civic Literacy Exam.</li> <li>Consult your advisor to make sure you have met the Foreign Language requirement.</li> <li>At the end of the semester, begin research on college and universities where you want to seek to transfer. Meet with a career advisor/coach to research your career options with a degree in Computer Engineering.</li> <li>Remember to start collecting artifacts from your courses for your Academic &amp; Career Portfolio in SLS 2370.</li> </ul>
Choose one: AMH 2020 – US History from 1865 <i>OR</i> POS 1041 – American Government iv (Social Science & civic literacy)	
MAC 1105 - College Algebraiv vi (Mathematics core)	
CHM 2045/L – General Chemistry I/Lab (Physical Science) (4 cr)	Begin applying for Financial Aid and Scholarships     You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)
	R CREDIT HOURS: 13
SEMESTER 2	ACTION ITEMS
Choose one: ENC 1102 – Freshman Composition II <i>OR</i> CRW 2001 – Creative Writing <i>OR</i> ENC 1141 – Writing about Literature <sup>iv</sup> (Communication)	
MAC 1140 - Precalculus iv (Mathematics)	Meet with your advisor to confirm or update your
MAC 1114 - Trigonometry iv (Elective Prerequisite)	<ul><li>academic/career pathway and program of study.</li><li>Ask about transfer advising to discuss options to pursue the</li></ul>
Choose one: MUL 1010 – Music Appreciation <i>OR</i> THE 2000 – Theatre Appreciation <i>OR</i> ARH 1000 – Art Appreciation <i>OR</i> HUM 2020 – Introduction to Humanities iv (Humanities core)	<ul> <li>bachelor's degree.</li> <li>Continue collecting artifacts from courses for your Academic &amp; Career Portfolio in SLS 2370.</li> </ul>
Choose one: BSC 1005 – Biological Principles for Non-Majors OR Any general education BOT or BSC course (Biological Science Core)	
TOTAL SEMESTER	CREDIT HOURS: 15-16

SEMESTER 3	ACTION ITEMS
SLS 2370 – Personal Academic & Career Engagement iv (3rd Soc Sci )	<ul> <li>Meet with your advisor to confirm or update your academic/career pathway and program of study.</li> <li>Ask about transfer advising to discuss options to pursue the</li> </ul>
Choose one: PSY 2012 – General Psychology OR SYG 1000 – Introduction to Sociology OR SYG 2300 – Introduction to Social Psychology OR Any DEP or ECO course (Social Science) IV	<ul> <li>bachelor's degree.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)</li> </ul> </li> </ul>
MAC 2311 – Calculus I <sup>iv</sup> (Elective Prerequisite) (4 cr)	<ul> <li>Check with your advisor for important deadlines and dates</li> <li>Continue collecting artifacts from courses for your Academic &amp; Career Portfolio in SLS 2370.</li> </ul>
TOTAL SEMESTE	ER CREDIT HOURS: 10
SEMESTER 4	ACTION ITEMS
Choose one: SPC 2608 – Public Speaking OR SPC 1017 – Oral Communications OR SPC 1061 – Introduction to Academic and Professional Speaking <sup>iv</sup> (Communications)  PHY 2048C – General Physics with Calculus I (Physical Science/ Prerequisite) (5 cr)  MAC 2312 – Calculus II iv (Elective Prerequisite) (4 cr)  Choose one: COP 2334C – Beginning C++ Programming OR COP 2800 – JAVA (Elective Prerequisite)	<ul> <li>Begin applying to your top choice universities.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)</li> </ul> </li> <li>Check with your advisor for important deadlines and dates</li> </ul>
TOTAL SEMESTE	ER CREDIT HOURS: 15
SEMESTER 5	ACTION ITEMS
MAC 2313 – Calculus III <sup>iv v</sup> (Elective Prerequisite) (4 cr)	<ul> <li>After reviewing your final program of study, apply for Graduation.</li> <li>Meet with your advisor to apply for the degree.</li> <li>Sign up forcommencement.</li> <li>Request final transcripts to be sent to the college or university to where you will transfer.</li> <li>Congratulations, graduate!</li> </ul>
Choose one: LIT 2000 – Introduction to Literature OR Any general education AML, ENL, LIT, PHI or REL courses (Humanities) iv	
MAP 2302 – Elementary Differential Equations iv (Elective Prerequisite)	
PHY 2049C - General Physics with Calculus II (Elective Prerequisite) (5 cr)	

ACTION ITEMS

#### **TOTAL SEMESTER CREDIT HOURS: 15**

#### AACO DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS PATHWAY TOTAL: 68-69vi CREDIT HOURS

Degree plans may change in later catalogs. You may use this pathway if you entered the college on or before this date.

Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by FGC to award the degree.

This is not an official degree plan. For official degree requirements, click here.

Very You must earn a grade of "C" or better in all Gordon Rule classes.

This course is only offered in the spring term.

 $<sup>^{</sup>m Vi}$  If student enrolls ready for MAC 1114/1140, then MAC 1105 is not necessary, bringing the Total Pathway credits to 65-66.

Continue collecting artifacts from courses for your Academic &

Career Portfolio in SLS 2370.

# **COMPUTER ENGINEERING (60 Credits)**

**Guided Pathway: Associate of Arts** 

**Concentration: Computer Engineering (PART TIME)** 

For more information, visit www.fgc.edu and your academic advisor.

Meta-major: STEM

University Transfer: FAMU, FAU, FIU, FSU, UCF, UF, USF, UWF

CHM 2045/L - General Chemistry I/Lab (Physical Science) (4 cr)

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This is the sequence of courses for students interested in majoring in *Computer Engineering* at one of the universities listed above. It does not represent a contract, nor does it guarantee course availability or entry into your university of choice. This pathway presents classes needed for your baccalaureate degree in *Computer Engineering*. Courses that complete the degree are listed below. As always, visit your academic advisor each semester to help you keep on track for graduation.



PART-TIME Pathway

\*Note: All AA degrees must satisfy the Foreign Language requirement for graduation. Please see catalog\*

SEMESTER BY SEMESTER MAP FOR PART-TIME STUDENTS		
SEMESTER 1	ACTION ITEMS	
<b>ENC 1101</b> – Freshman Composition I iv (Communication core)	<ul> <li>Meet with your advisor to confirm academic and career goals by the end of the semester.</li> <li>REQUIRED: Complete the Computer Competency course within Canvas.</li> <li>Consult your advisor to make sure you have met the Foreign Language requirement.</li> <li>Remember to start collecting artifacts from your courses for your Academic &amp; Career Portfolio in SLS 2370.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)</li> </ul> </li> </ul>	
MAC 1105 – College Algebra <sup>iv vi</sup> (Mathematics core)		
TOTAL SEMESTER CREDIT HOURS: 6		
SEMESTER 2	ACTION ITEMS	
Choose one: AMH 2020 – US History from 1865 <i>OR</i> POS 1041 – American Government iv (Social Science & civic literacy)  MAC 1140 – Precalculus iv (Mathematics)  Choose one: BSC 1005 – Biological Principles for Non-Majors <i>OR</i> Any general education BOT or BSC course (Biological Science Core) (3-4 cr)	<ul> <li>At the end of the semester, begin research on college and universities where you want to seek to transfer. Meet with a career advisor/coach to research your career options with a degree in <i>Computer Engineering</i>.</li> <li>Signup for and pass the Florida Civic Literacy Exam.</li> <li>Continue collecting artifacts from courses for your Academic &amp; Career Portfolio in SLS 2370.</li> </ul>	
TOTAL SEMESTER	R CREDIT HOURS: 9-10	
SEMESTER 3	ACTION ITEMS	
MAC 1114 - Trigonometry <sup>iv</sup> (Elective Prerequisite)  Choose one: ENC 1102 - Freshman Composition II OR  CRW 2001 - Creative Writing OR  ENC 1141 - Writing about Literature <sup>iv</sup> (Communication)  Choose one: MUL 1010 - Music Appreciation OR  THE 2000 - Theatre Appreciation OR  ARH 1000 - Art Appreciation OR  HUM 2020 - Introduction to Humanities <sup>iv</sup> (Humanities core)	<ul> <li>Meet with your advisor to confirm or update your academic/career pathway and program of study.</li> <li>Continue collecting artifacts from courses for your Academic &amp; Career Portfolio in SLS 2370.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)</li> </ul> </li> </ul>	
TOTAL SEMESTER CREDIT HOURS: 9		
SEMESTER 4	ACTION ITEMS	
MAC 2311 – Calculus I iv (Elective Prerequisite) (4 cr)	Meet with your advisor and ask about transfer advising to discuss options to pursue the bachelor's degree.	

**TOTAL SEMESTER CREDIT HOURS: 8** 

SEMESTER 5	ACTION ITEMS	
MAC 2312 – Calculus II iv (Elective Prerequisite) (4 cr)	<ul> <li>Meet with your advisor to confirm academic and career goals by the end of the semester.</li> <li>Meet with a career advisor/coach to research your career options.</li> <li>Continue collecting artifacts from your courses for your Academic &amp; Career Portfolio in SLS 2370.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2024)</li> </ul> </li> </ul>	
Choose one: COP 2334C – Beginning C++ Programming OR COP 2800 – JAVA (Elective Prerequisite)		
Choose one: SPC 2608 – Public Speaking OR SPC 1017 – Oral Communications OR SPC 1061 – Introduction to Academic and Professional Speaking <sup>iv</sup> (Communications)		
TOTAL SEMESTER CREDIT HOURS: 10		
SEMESTER 6	ACTION ITEMS	
MAC 2313 – Calculus III <sup>iv v</sup> (Elective Prerequisite) (4 cr)  MAP 2302 – Elementary Differential Equations <sup>iv v</sup> (Elective Prerequisite)	<ul> <li>Meet with your advisor to confirm or update your academic/career pathway and program of study.</li> <li>Continue collecting artifacts from your courses for your Academic &amp; Career Portfolio in SLS 2370.</li> </ul>	
SLS 2370 – Personal Academic & Career Engagement iv (3rd Soc Sci)		
TOTAL SEMESTER CREDIT HOURS: 10		
SEMESTER 7	ACTION ITEMS	
Choose one: LIT 2000 – Introduction to Literature OR Any general education AML, ENL, LIT, PHI or REL courses (Humanities) iv	<ul> <li>Begin applying to your top choice universities.</li> <li>Begin applying for Financial Aid and Scholarships         <ul> <li>You can start the FAFSA in October for the next academic year. (i.e., in October 2023, you can complete the FAFSA for</li> </ul> </li> </ul>	
PHY 2048C – General Physics with Calculus I (Elective Prerequisite)(5 cr)	<ul> <li>if you plan to register for classes at a college or university</li> <li>Fall 2024)</li> <li>Check with your advisor for important deadlines and dates</li> </ul>	
	ER CREDIT HOURS: 8	
SEMESTER 8	ACTION ITEMS	
Choose one: PSY 2012 – General Psychology OR SYG 1000 – Introduction to Sociology OR SYG 2300 – Introduction to Social Psychology OR Any DEP or ECO course (Social Science) iv	<ul> <li>After reviewing your final program of study, apply for Graduation.         <ul> <li>Meet with your advisor to apply for your degree.</li> <li>Sign up for commencement.</li> </ul> </li> <li>Request final transcripts to be sent to the college or university to where you will transfer.</li> <li>Congratulations, graduate!</li> <li>RCREDIT HOURS: 8</li> </ul>	
PHY 2049C – General Physics with Calculus II (Elective Prerequisite) (5 cr)		

### AACO DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS PATHWAY TOTAL: 68-69vi CREDIT HOURS

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I Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by FGC to award the degree.

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IV You must earn a grade of "C" or better in all Gordon Rule classes.

V This course is only offered in the spring term.

 $<sup>^{</sup>m Vi}$  If student enrolls ready for MAC 1114/1140, then MAC 1105 is not necessary, bringing the Total Pathway credits to 65-66.