COMPUTER ENGINEERING (60 Credits)

Guided Pathway: Associate of Arts
CONCENTRATION: Computer Engineering (FULL 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**

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[ii]. 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.

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

FULL-TIME Pathway

SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS

SEMESTER 1	ACTION ITEMS
ENC 1101 – Freshman Composition I [iv] *(Communication core)*	• Meet with your advisor to confirm academic and career goals by the end of the semester. • **REQUIRED:** Complete the ***Computer Competency*** **course** within Canvas. • Consult your advisor to make sure you have met ***the Foreign Language requirement***. • 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***. • Remember to start collecting artifacts from your courses for your Academic & Career Portfolio in SLS 2370. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)*
Choose one: **AMH 2020** – US History from 1865 ***OR*** **POS 1041** – American Government [iv] *(Social Science & civic literacy)*	
MAC 1105 – College Algebra[iv] [vi] *(Mathematics core)*	
CHM 2045/L – General Chemistry I/Lab *(Physical Science) (4 cr)*	
TOTAL SEMESTER CREDIT HOURS: 13	

SEMESTER 2	ACTION ITEMS
Choose one: **ENC 1102** – Freshman Composition II ***OR*** **CRW 2001** – Creative Writing ***OR*** **Any AML, ENL, *OR* LIT course (except LIT 2000)**[iv] *(Communication)*	• Meet with your advisor to confirm or update your academic/career pathway and program of study. • Ask about transfer advising to discuss options to pursue the bachelor's degree. • Continue collecting artifacts from courses for your Academic & Career Portfolio in SLS 2370.
MAC 1140 – Precalculus [iv] *(Mathematics)*	
MAC 1114 - Trigonometry [iv] *(Elective Prerequisite)*	
Choose one: **MUL 1010** – Music Appreciation ***OR*** **THE 2000** – Theatre Appreciation ***OR*** **ARH 1000** – Art Appreciation ***OR*** **HUM 2020** – Introduction to Humanities [iv] *(Humanities core)*	
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
Choose one: **HUM 2551** – Philosophy and Religion ***OR*** **LIT 2000** – Introduction to Literature ***OR*** **Any general education PHI or REL** courses *(Humanities)* [iv]	• Meet with your advisor to confirm or update your academic/career pathway and program of study. • Ask about transfer advising to discuss options to pursue the bachelor's degree. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)* • Check with your advisor for important deadlines and dates • Continue collecting artifacts from courses for your Academic & Career Portfolio in SLS 2370.
Choose one: **PSY 2012 –** General Psychology ***OR*** **SYG 1000 –** Introduction to Sociology ***OR*** **SYG 2300** – Introduction to Social Psychology ***OR*** **Any DEP, ANT, or ECO course** *(Social Science)* [iv]	
SPC 2608 – Public Speaking [iv] *(Communications)*	
MAC 2311 – Calculus I [iv] (*Elective Prerequisite*) (4 cr)	
TOTAL SEMESTER CREDIT HOURS: 13	

SEMESTER 4	ACTION ITEMS
SLS 2370 – Personal Academic & Career Engagement [iv] (3rd Soc Sci)	• Begin applying to your top choice universities. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)* • Check with your advisor for important deadlines and dates
PHY 2048C – General Physics with Calculus I *(Physical Science/ Prerequisite)* (5 cr)	
MAC 2312 – Calculus II [iv] (*Elective Prerequisite*) (4 cr)	
Choose one: **COP 1334C** – Beginning C++ Programming ***OR*** **COP 1800** – JAVA *(Elective Prerequisite)*	
TOTAL SEMESTER CREDIT HOURS: 15	
SEMESTER 5	**ACTION ITEMS**

MAC 2313 – Calculus III [iv v] (*Elective Prerequisite*) (4 cr)	• After reviewing your final program of study, apply for Graduation.
	  ○ Meet with your advisor to apply for the degree.
	  ○ Sign up for commencement.
	• Request final transcripts to be sent to the college or university to where you will transfer.
	• Congratulations, graduate!

MAP 2302 – Elementary Differential Equations [iv v] (*Elective Prerequisite*)	
PHY 2049C – General Physics with Calculus II *(Elective Prerequisite)* (5 cr)	
TOTAL SEMESTER CREDIT HOURS: 12	
AACO DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS|PATHWAY TOTAL: 68-69[vi] CREDIT HOURS	

[i] Degree plans may change in later catalogs. You may use this pathway if you entered the college on or before this date.
[ii] Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by FGC to award the degree.
[iii] This is not an official degree plan. For official degree requirements, click here.
[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.
[vi] If student enrolls ready for MAC 1114/1140, then MAC 1105 is not necessary, bringing the Total Pathway credits to 65-66.

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**

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

PART-TIME Pathway

SEMESTER BY SEMESTER MAP FOR PART-TIME STUDENTS

SEMESTER 1	ACTION ITEMS
ENC 1101 – Freshman Composition I [iv] *(Communication core)*	• Meet with your advisor to confirm academic and career goals by the end of the semester. • **REQUIRED:** Complete the ***Computer Competency*** **course** within Canvas. • Consult your advisor to make sure you have met ***the Foreign Language requirement***. • Remember to start collecting artifacts from your courses for your Academic & Career Portfolio in SLS 2370. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)*
MAC 1105 – College Algebra[iv] [vi] *(Mathematics core)*	
TOTAL SEMESTER CREDIT HOURS: 6	

SEMESTER 2	ACTION ITEMS
Choose one: **AMH 2020** – US History from 1865 ***OR*** **POS 1041** – American Government [iv] *(Social Science & civic literacy)*	• 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***. • Continue collecting artifacts from courses for your Academic & Career Portfolio in SLS 2370.
MAC 1140 – Precalculus [iv] *(Mathematics)*	
Choose one: **BSC 1005 –** Biological Principles for Non-Majors ***OR*** **Any general education BOT or BSC course** *(Biological Science Core) (3-4 cr)*	
TOTAL SEMESTER CREDIT HOURS: 9-10	

SEMESTER 3	ACTION ITEMS
MAC 1114 - Trigonometry [iv] *(Elective Prerequisite)*	• Meet with your advisor to confirm or update your academic/career pathway and program of study. • Continue collecting artifacts from courses for your Academic & Career Portfolio in SLS 2370. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)*
Choose one: **ENC 1102** – Freshman Composition II ***OR*** **CRW 2001** – Creative Writing ***OR*** **Any AML, ENL, *OR* LIT course (except LIT 2000)**[iv] *(Communication)*	
Choose one: **MUL 1010** – Music Appreciation ***OR*** **THE 2000** – Theatre Appreciation ***OR*** **ARH 1000** – Art Appreciation ***OR*** **HUM 2020** – Introduction to Humanities [iv] *(Humanities core)*	
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. • Continue collecting artifacts from courses for your Academic & Career Portfolio in SLS 2370.
CHM 2045/L – General Chemistry I/Lab *(Physical Science) (4 cr)*	
TOTAL SEMESTER CREDIT HOURS: 8	

SEMESTER 5	ACTION ITEMS
MAC 2312 – Calculus II [iv] (*Elective Prerequisite*) (4 cr)	• Meet with your advisor to confirm academic and career goals by the end of the semester. • Meet with a career advisor/coach to research your career options. • Continue collecting artifacts from your courses for your Academic & Career Portfolio in SLS 2370. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)*
Choose one: **COP 1334C** – Beginning C++ Programming ***OR*** **COP 1800** – JAVA *(Elective Prerequisite)*	
SPC 2608 – Public Speaking [iv] *(Communications)*	
TOTAL SEMESTER CREDIT HOURS: 10	
SEMESTER 6	**ACTION ITEMS**
MAC 2313 – Calculus III [iv v] (*Elective Prerequisite*) (4 cr)	• Meet with your advisor to confirm or update your academic/career pathway and program of study. • Continue collecting artifacts from your courses for your Academic & Career Portfolio in SLS 2370.
MAP 2302 – Elementary Differential Equations [iv v] (*Elective Prerequisite*)	
Choose one: **HUM 2551** – Philosophy and Religion ***OR*** **LIT 2000** – Introduction to Literature ***OR*** **Any general education PHI or REL** courses *(Humanities)* [iv]	
TOTAL SEMESTER CREDIT HOURS: 10	
SEMESTER 7	**ACTION ITEMS**
SLS 2370 – Personal Academic & Career Engagement [iv] (3rd Soc Sci)	• Begin applying to your top choice universities. • Begin applying for Financial Aid and Scholarships ○ You can start the FAFSA in October for the next academic year. *(i.e., in October 2020, you can complete the FAFSA for if you plan to register for classes at a college or university Fall 2021)* • Check with your advisor for important deadlines and dates
PHY 2048C – General Physics with Calculus I *(Elective Prerequisite)*(5 cr)	
TOTAL SEMESTER 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, ANT, or ECO course *(Social Science)* [iv]
	• After reviewing your final program of study, apply for Graduation.
	  ○ Meet with your advisor to apply for your degree.
	  ○ Sign up for commencement.
	• Request final transcripts to be sent to the college or university to where you will transfer.
	• Congratulations, graduate!

PHY 2049C – General Physics with Calculus II *(Elective Prerequisite)* (5 cr)	
TOTAL SEMESTER CREDIT HOURS: 8	
AACO DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS|PATHWAY TOTAL: 68-69[vi] CREDIT HOURS	

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