Bachelor of Computer Science

Online Course Sequence Plan

This "Flight Plan" is intended to serve as a planning resource for online students in developing a Plan of Study for their junior and senior years, in consultation with their academic advisor. It assumes that students have completed all Intellectual Foundations Program (IFP) courses either at FAU, by completing an A.A. degree from any Florida public college, university or community college, or through equivalent coursework at another regionally accredited institution. It also assumes that students have completed **most** of the prerequisites for the major, listed below. Very few students will have completed all of the pre-requisites, so there is room in the flight plan below for students to complete their prerequisites in their Junior year (year 1 below).

Courses in the Computer Science program are not offered online every semester - the Flight Plan provides students with information as to which courses will be available online in which semester. Because the courses in the Computer Science program are highly sequenced, with pre-requisites for all but the first 2 courses in the program, students who are entering the program in the Summer semester should try to complete some of the prerequisites for the program in that semester, and then begin the sequence below in the Fall; students entering in the Spring semester should be able to take COP 2220 and CDA 3201 in their first semester, but may need to adjust their course sequence based on course availability. Students are strongly encouraged to consult with an academic advisor before they begin the program.

We are providing 2 flight plans: one for students who have already completed COP 2220 (Intro to Programming in C) or its equivalent at another institution, and one for those who have not yet completed that course.

Prerequisites for the Bachelor of Computer Science program:

MAC 2311	Calculus with Analytic Geometry 1
MAC 2312	Calculus with Analytic Geometry 2
PHY 2048	General Physics with Calculus I
PHY 2048L	General Physics with Calculus I Lab
PHY 2049	General Physics with Calculus II
PHY 2049L	General Physics with Calculus II Lab
MAD 2104	Discrete Mathematics

Math Elective: Choose one of the following courses:

MAC 2313 Calculus w/Analytic Geometry III
MAD 3400 Numerical methods
MAP 2302 Differential Equations 1
MAP 4260 Queuing Theory
MAS 2103 Matrix Theory
MAP 3305 Engineering Math 1
MAS 4301 Modern Algebra

One of the following:

CHM 1045 + CHM 1045L	General Chemistry I + Lab
BSC 2010 + BSC 2010L	Introduction to General Biology I + Lab
GLY 1010 + GLY 1010L	Physical Geology + Lab

Flight Plan for students who have completed COP 2220 (Intro to Programming in C) or its equivalent

	Semester	Course ID	Course Name	Credits
Year 1	Fall	COP3014	Foundations of Computer Science	3
		MAD2104	Discrete Mathematics (or other prerequisite)	
		CDA3201C	Intro to Logic Design	4
			Physics 2 or math elective (see above) or other prerequisite	
	Spring	COP3530	Data Structures	3
		CDA3331C	Microprocessors	3
		STA 4821	Stochastic Models for CS	3
		COP 3813	Intro to Internet Computing	3
	Summer	elective 1	CS Elective *	3
		elective 2	CS Elective *	3
Year 2	Fall	CEN 4010	Principles of Software Engineering	3
		COT 4420	Formal Languages & Automata	3
		elective 3	CS Elective *	3
		elective 4	CS Elective *	3
		EGN 4950C	Engineering Design 1	3
	Spring	COP 4610	Computer Operating Systems	3
		COP 3540	Intro to Database Structures	3
		elective 5	CS Required Elective (COP 4020 / CAP 4630)	3
		COT 4400	Design and Analysis of Algorithms	3
		EGN4952C	Engineering Design 2	3
	Summer	elective 6	CS Elective *	3
		Elective 7	CS Elective *	3
			Total Credits	**64 (incl. COP 2220)**

*CS Electives currently offered online:

Course ID	Course Name	Pre-requisites
COP 4020	Programming Languages (Required elective)	COP 3530, COP 4420 (or Co-req)
CAP 4630	Intro to Artificial Intelligence (Required elective)	COP 3530
CAP 4034	Computer Animation	
CNT 4104	Introduction to Data Communications	COP 3530, CDA 3331C
COP 4331	Object-Oriented Design and Programming	COP 3530
CAP 4401	Digital Image Processing	STA 4821, COP 3530
COP 4814	Web Services	COP 3813, COP 3014
CNT 4403	Intro to Data and Network Security	COP 4610
COP 4854	Cutting Edge Web Technologies	COP 3530, COP 3813
COT 4900	Directed Independent Study	

Flight Plan for students who have not yet completed COP 2220 (Intro to Programming in C) or its equivalent:

	Semester	Course ID	Course Name	Credits
Year 1	Fall	COP 2220	Introduction to programming	3
		MAD2104	Discrete Mathematics or other prerequisite	
		CDA3201C	Intro to Logic Design	4
			Physics 2 or math elective (see above)or other prerequisite	
	Spring	COP3014	Foundations of Computer Science	3
		CDA3331C	Microprocessors	3
		STA 4821	Stochastic Models for CS	3
			Prerequisite	
	Summer	COP3530	Data Structures	3
		COP 3813	Intro to Internet Computing	3
		elective 1	CS Elective *	3
Year 2	Fall	CEN 4010	Principles of Software Engineering	3
		COT 4420	Formal Languages & Automata	3
		elective 2	CS Elective *	3
		elective 3	CS Elective *	3
		EGN 4950C	Engineering Design 1	3
	Spring	COP 4610	Computer Operating Systems	3
		COP 3540	Intro to Database Structures	3
		elective 4	CS Required Elective (COP 4020 / CAP 4630)	3
		COT 4400	Design and Analysis of Algorithms	3
		EGN4952C	Engineering Design 2	3
	Summer	elective 5	CS Elective *	3
		elective 6	CS Elective *	3
		elective 7	CS Elective *	3
			Total Credits	**64**

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