

Departmental Residency Requirement: At least 24 hours of computer science coursework must be completed in the CS department at UCF (18 hours of these in regularly scheduled 4000-5000-level courses and six (6) of these in 3000- to 5000-level).

2.4 Transfer of Credit

Courses with a common course number taken at any Florida State University System (SUS) institution or Florida community college are automatically transferable. Students with a Bachelor of Science from an accredited institution or an Associate of Arts degree from a Florida SUS institution or Florida community college automatically satisfy the GEP. Substitutions for GEP must be approved through Academic Services, Millican Hall (MH) 210.

Substitutions for department requirements are on a course-by-course basis and MUST be approved by the CS Undergraduate Coordinator and the EECS Director. Instructions for this process are in the Computer Science office: Harris Corporation Engineering Center (HEC 346). The decision is typically based on the degree of similarity of the two courses both in content and level of presentation. Regardless of transfer credit, the University and Department residency requirements must be satisfied.

Exception: Substitution requests for MAC 2311, MAC 2312, PHY 2048, PHY 2049, CHM 2045, CHM 2046, BSC 2010 and BSC 2011 must be filed in the Academic Affairs Office (ENG1 107).

3. How to Apply

For an application to UCF and CS, visit or write to:

www.admissions.mca.ucf.edu UCF Office of Undergraduate Admissions PO Box 160111, Orlando, FL 32816-0111

For more information contact:

Department of EECS CS Undergraduate Program University of Central Florida, PO Box 162362 Orlando, FL 32816-2362

 $\underline{www.eecs.ucf.edu} \ or \ \underline{www.eecs.ucf.edu/undergrad/CS/}$

4. Additional Information

Computer Science Office/Advising (HEC 346):	(407) 823-2341
College Academic Affairs (ENG1 107):	(407) 823-2455
Admissions:	(407) 823-3000
Bookstore:	(407) 823-2665
Campus Tours:	(407) 823-3000
Info & Directions to UCF:	
Employment Opportunity:	(407) 823-2778
Financial Aid:	
Housing:	(407) 823-4663
Multicultural Academic & Support:	(407) 823-2716
Veteran's Affairs:	(407) 823-2707
University Honors Program:	(407) 823-2076
UCF Web site:	

April 2012



Stands For Opportunity

B.S. Degree Program in Computer Science

I. General Information

This pamphlet briefly outlines the undergraduate Computer Science (CS) program for the Bachelor of Science degree offered by the Department of Electrical Engineering & Computer Science (EECS). CS students have many unique advantages at UCF:

- The UCF Programming Team is one of the best in the world! CS teams compete annually in the ACM's International Programming Contest, and our CS team has an unmatched record finishing in the Southeast region's top three every year since 1982! CS teams
- have earned five Top-10 finishes out of 8,000 teams world-wide.
- EECS has prestigious research programs for undergraduates (REUs). EECS has been an NSF REU site in Computer Vision since NSF started the program in 1987.
- The Association for Computing Machinery (ACM) student chapter, additional Research
- Experiences for Undergraduates (REUs), IEEE Computer Society and UPE Computer Science Honor Society and the CS Foundation Exam all provide real-life benefits including networking, face-to-face meetings with experts and career experience.
- The Department's new home is the Harris Corp. Engineering Center — an ultra high-tech building with revolutionary equipment, computers and labs for students.
- The Computer Science Foundation Exam is a qualifying test all CS majors must pass to advance to upper-level CS courses. Nationally, only UCF's CS Program uses a test this way to qualify its students. The exam covers problem solving techniques, algorithms, abstraction, proofs and language skills. Tests are held each semester, and the exam helps ensure the success of our students. It is a major resume builder and a feature many industry partners highlight as a primary reason

- they want to hire CS graduates from our Department of EECS.
- A detailed description of our computer facilities, faculty expertise and course descriptions is at: www.eecs.ucf.edu/. Click on the "Undergraduate Programs" heading and then "B.S. in Computer Science" and the sections's other links.

I.I Accreditation

The Computer Science BS program is accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: (410) 347-7700.

2. The Academic Program

The following information is gathered from the UCF catalog,

the Undergraduate Policies and Procedures Manual and the program procedures in EECS. This brochure should not be considered a legal document, is not necessarily exhaustive and is subject to change without notice.

All UCF students must fulfill a 36-hour General Education Program (GEP)

requirement. The GEP is automatically satisfied by students with a prior B.S. from an accredited institution or an A.A. degree from a Florida community college. Please consult the UCF catalog for specific details. Students must complete 120 semester hours of course work with a grade point average (GPA) of at least 2.00 and satisfy all University and Computer Science program requirements to earn a B.S. in Computer Science.

Any student wishing to receive a BS+MS degree in CS, a double-major or to seek a second Bachelor's degree should consult the UCF catalog and the CS coordinator. A student must be an official CS major to earn the computer science degree.

2.1 Foreign Language & Multicultural Requirements

There are two separate issues with regard to foreign languages. In order to be admitted to the University, the State of Florida requires two years of high school foreign

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DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE

BS+MS Degree in Computer Science is

also offered by the Dept of EECS

Earn BOTH degrees in 5 years!

For more information on the BS+MS, contact:

Dr. Hassan Foroosh, CS Graduate Program Coordinator

BSMSinCS@eecs.ucf.edu

Plan	Fall-1 (Sem 1)	Cr	Spring-1 (Sem 2)	Cr	Smmr-1 (Sem 3)	Cr	Fall-2 (Sem 4)	Cr	Spring-2 (Sem 5)	Cr	Smmr-2 (Sem 6)	Cr	Fall-3 (Sem 7)	Cr	Spring-3 (Sem 8)	Cr	Smmr-3 (Sem 9)	Cr	Fall-4 (Sem 10)	Cr	Spring -4 (Sem 11)	Cr	Total Credits
	COP3223	3	COP3502	3	MAC2312	4	COP3503C	4	COP4331	4	STA2023	3	EEL4768	4	COP4600	3	COT4210	3	COT4810	3	CS-A	3	
	COT3100	3	CDA3103	3	COP3330	3	COP3402	3	ENC3241	3	GEP-4	3	COP4020	3	CS-A	3			CS-A	3	SUP-3	3	
4Year	ENC1101	3	MAC2311	4			PHY2048C	4	PHY2049C	4			SUP-1	4	SUP-1	4			GEP-2a	3	GEP-2b	3	
4 Tear	GEP-1	3	ENC1102	3			GEP-3	3	CIS3360	3			GEP-5	3	SUP-2	3			SUP-2	3	Free	3	
			F.Exam	0	F.Exam	0	F.Exam	0															Total
	TOTALS=>	12		13		7		14		14		6		14		13		3		12		12	120

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language (or equivalent). This is called "Foreign Language Admission Requirement." In some cases, students who did not have two years of foreign language in high school are provisionally admitted but they must satisfy the requirement before graduation.

Foreign Language Graduation Requirement: All undergraduates must demonstrate proficiency in a testable foreign language (see UCF catalog for the definition of "testable") equivalent to successful completion of one year at the college level. Alternatively, students may satisfy this requirement by the successful completion of the equivalent course work. In the case of non-testable languages, the requirement may be satisfied by documentation through the Office of Undergraduate Studies.

Computer science students who satisfied the Foreign Language Admission Requirement may satisfy the Foreign Languages Graduation Requirement by taking one course from a list of multicultural or college-level foreign language courses and CIS 3360. Those who have not yet satisfied the Foreign Language Admission Requirement should complete two (2) semesters of a single foreign language at college level. This simultaneously satisfies both admission and graduation requirements.

Please see the Computer Science Academics Web page (www.eecs.ucf.edu/undergrad/CS/) and click on "Foreign Language Requirement or Multicultural Courses" for a current list of courses that satisfy this multicultural requirement.

2.2 Course Requirements

2.2.1 Computer Science Core (56 hours)

Basic Core (Total 22 hours)

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COP 3223	Intro to Programming with C
COP 3330	Intro to OO Programming with Java
COP 3502	Computer Science I
COP 3503	Computer Science II (4 cr)
CDA 3103	Computer Organization (3 cr)
COP 3402	Systems Software
COT 3100	Intro to Discrete Structures
COT 3960	CS Foundation Exam

Support Courses (Total 33 hours)

MAC 2311	Calculus w/ Analytic Geometry I
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MAC 2312	Calculus w/ Analytic Geometry II
STA 2023	Statistical Methods I
PHY 2048C	Physics for Engr. & Sci. I

PHY 2049C Physics for Engr. & Sci. II

Two (2) Science Courses¹

ENC 3241 Technical Report Writing CIS 3360 Security in Computing

¹ These must be courses required by the respective science majors, such as BSC 2010, BSC 2011, CHM 2045 or CHM 2046. (8 cr)

2.2.2. Upper Division Required Courses (20 hours)²

COP 4331	Procs for OO Development (4 cr)
EEL 4768	Intro to Computer Architecture (4 cr)
COP 4020	Programming Languages
COP 4600	Introduction to Operating Systems
COT 4210	Discrete Computational Structures
² Students must ear	n a 2.5 GPA in above courses.
COT 4810	Topics in Computer Science

2.2.3 Restricted Electives (15 hours)

Nine (9) additional hours of 4000- and 5000-level computer science courses. A partial list of such elective courses includes: CAP 4020, CAP 4453, CAP 4630, CGS 5131, COP 4520, COP 4516, COP 4710, COT 4110, COT 4500, CIS 4361³, and CIS 4363³. No more than three (3) hours of independent study in computer science may be used. (³See SCAN Minor.)

Six (6) hours of math or statistics, exclusive of independent study. Course work must be selected from STA, MAP, MAA, MAD, MAS prefixes at the 4000 or 5000 level and MAC 2313, MAP 2302, MAS 3105 and MAS 3106.

2.3 Special Departmental Requirements

Foundation Exam: Prior to taking COP 4331 and COP 4600 (and beyond), students MUST pass the Foundation Exam, which covers problem solving techniques, algorithms, abstractions, proofs, programming skills, etc. Typically, students are expected to take the Foundation Exam in the same semester they complete COP 3502 and COT 3100.

Grade Requirements: All department-required courses (listed in sections 2.2.1, 2.2.2 and 2.2.3) must be passed with a "C" grade or better. A minimum GPA of 2.5 is required in the courses listed in section 2.2.2.

Plan	Fall-1 (Sem 1)	Cr	Spring-1 (Sem 2)	Cr	Smmr-1 (Sem 3)	Cr	Fall-2 (Sem 4)	Cr	Spring-2 (Sem 5)	Cr	Smmr-2 (Sem 6)	Cr	Total Credits	Cr	
	COP3223	3	COP3502	3	COP3402	3	COP4331	4	EEL4768	4	COP4600	3	AA-Degree	60	1
	COT3100	3	CDA3103	3	COP3503C	4	COT4210	3	COT4810	3	COP4020	3			
AA	ENC3241	3	COP3330	3			CS-A	3	CS-A	3					I
+	SUP-3	3	SUP-2	3			CIS3360	3	CS-A	3					
2years															
-	•		F.Exam	0	F.Exam	0	F.Exam	0							Total
	TOTALS=>	12		12		7		13		13		6	63	60	120

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		PLAN COMMENTS:						
GEP-1	Speech GEP	Choose one course from the Speech Group, GEP-1.						
GEP-2	History GEP	Choose one course from the Historical Foundations Group, GEP-2.						
GEP-3	Culture GEP	Choose one course from the Cultural Foundations Group, GEP-3.						
GEP-4	History or Culture GEP	Choose one additional course from GEP-2 or GEP-3, GEP-4.						
GEP-5	Social 1 GEP	Choose one course from Social Foundations Group 1, GEP-5 .						
GEP-6	Social 2 GEP	Choose one course from Social Foundations Group 2, GEP-6.						
SUP-1	CS Science	Choose two courses (at least 6 cr) from the Science Group ; one sequence in the same discipline or one course from each discipline.						
SUP-2	CS Math/Stat	Choose two courses from the Upper Division Math/Stat Group.						
SUP-3	CS Culture & FL	Choose one course from the CS Multi-culture Group . This includes any college level Foreign Language.						
CS-A	CS - 4000/5000	Choose one course from Group , CS-A . Any 4000/5000 level regular or special topics course offered by the CS faculty. This group also includes at most 3cr of 4000 level Independent Study or Directed Research on the undergraduate plan of study.						

Note: The "Sample Program of Study" assumes that the student has an AA from a Florida Community College and has completed all science/math courses.