UNIVERSITY OF South Carolina

Major Map: Computer Information Systems
Bachelor of Science (B.S.)
College of Engineering and Computing
Department of Computer Science & Engineering
Bulletin Year: 2023-2024

This course plan is a recommended sequence for this major. Courses designated as critical **(!)** may have a deadline for completion and/or affect time to graduation. Please see the Program Notes section for details regarding "critical courses" for this particular Program of Study.

!	Course Subject and Title	Credit Hours	Min. Grade[1]	Program GPA[2]	Code	Prerequisites	Notes
Semester One (15-16 Credit Hours)							
	ENGL 101 Critical Reading and Composition	3	C		CC-CMW		
!	MATH 122 Calc. for Bus. Admin. & Soc. Sci. *or* MATH 141 Calculus 1[3]	3-4	C		CC-ARP	C or better in MATH 111/111I or 115 *(MATH 122 only)*; C or better in MATH 112/115/116 *(MATH 141 only)*; *or* Math placement test score	
!	CSCE 145 Algorithmic Design I	4	C	*	CC-ARP	Prereq or Coreq: MATH 111 *or* 115	
	CSCE 190 Computing in the Modern World	1	C	*	PR	Prereq or Coreq: CSCE 145, 204, 205, *or* 206	
	Carolina Core SCI[4]	4			CC-SCI		
Semester Two (15 Credit Hours)							
	ENGL 102 Rhetoric and Composition	3	C		CC-CMW CC-INF	C or better in ENGL 101	
	Carolina Core SCI[4]	4			CC-SCI		
!	CSCE 146 Algorithmic Design II	4	C	*	PR	C or better in CSCE 145, Prereq or Coreq: MATH 122 *or* 141	
!	CSCE 215 UNIX/Linux Fundamentals	1	C	*	PR	CSCE 145	
	Carolina Core AIU[4]	3			CC-AIU		
Semester Three (15 Credit Hours)							
	CSCE 242 Web Applications *or* CSCE 205 Business Applications Programming	3	C	*	MR	MSGC 290 *or* CSCE 101 or above CSCE 146 (*CSCE 242 only*)	
	CSCE 210 Computer Hardware Foundations *fall only*	3	C	*	PR	D or better in CSCE 145, 204, 205, 206, *or* 207	
	CSCE 247 Software Engineering	3	C	*	PR	C or better in CSCE 146	
	ECON 224 Introduction to Economics[5]	3			PR		
	Carolina Core CMS[4]	3			CC-CMS		
Semester Four (15 Credit Hours)							
	CSCE 201 Introduction to Computer Security	3	C	*	PR	Prereq or Coreq: CSCE 101, 102, *or* 145	
!	CSCE 240 Advanced Programming Techniques	3	C	*	PR	D or better in CSCE 215 & C or better in CSCE 146	
!	MATH 174 Discrete Math. for Computer Sci. *or* MATH 374 Discrete Structures	3	C		PR	C or better in MATH 115, 116, 122 or 141 or pre-calculus placement test score (MATH 174 only); C or better in MATH 142 & CSCE 146 *(MATH 374 only)*	
	MGSC 290 Computer Info. Systems in Bus.	3			PR		
	Carolina Core GSS[4]	3			CC-GSS		
Semester Five (16 Credit Hours)							
!	CSCE 350 Data Structures & Algorithms	3	C	*	MR	CSCE 240; MATH 174 *or* 374 *or* 574	
	CSCE 390 Prof. Issues in Computer Sci. Engr.	1	C	*	CC-VSR		
	STAT 515 Statistical Methods I (*or* STAT 509 Statistics for Engineers)	3			PR	C or better in MATH 122 or 141 *or* both MATH 111 or higher *&* any statistics class *(STAT 515 only)*; MATH 142 *(STAT 509 only)*	
	ACCT 222 Survey of Accounting[5]	3			PR	MATH 122 or equiv. *or* sophomore standing	
	MGMT 371 Principles of Management[5]	3			PR		
	ENGL 462 Technical Writing *or* ENGL 463 Business Writing	3			PR	ENGL 101 & 102	
Semester Six (15 Credit Hours)							
	CSCE 520 Database System Design	3	C	*	MR	CSCE 240 *or* GEOG 563	
	CSCE 594 Strategic Mgmt. of Info. Systems *spring only*	3	C	*	MR		
	STAT 516 Statistical Methods II	3			PR	C or better in STAT 515, 509, 512, or equiv.	
	BIM Minor Elective[5]	3			PR	See Bulletin listing.	
	Carolina Core GHS[4]	3			CC-GHS		
Semester Seven (15 Credit Hours)							
!	CSCE 490 Capstone Computing Project I *fall only*	3	C	*	MR CC-INT	D or better in CSCE 240; Prereq or Coreq: D or better in CSCE 350	
	CSCE 416 Introduction to Computer Networks	3	C	*	MR	CSCE 146	
	CSCE 522 Information Security Principles *fall only*	3	C	*	MR	CSCE 146; MATH 174 *or* 374	
	BIM Minor Elective[5]	3			PR	See Bulletin listing.	
	Liberal Arts Elective[6]	3			PR	See Bulletin listing.	

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Semester Eight (12 Credit Hours)							
	CSCE 492 Capstone Computing Project II *spring only*	3	C	*	MR	D or better in CSCE 240, 350, & 490	
	Computer Information Systems Major Elective[7]	3	C	*	MR	See Bulletin listing.	
	Liberal Arts Elective[6]	3			PR	See Bulletin listing.	
	Liberal Arts Elective[6]	3			PR	See Bulletin listing.	
Take during any semester (0-6 Credit Hours)							
	Carolina Core GFL[4]	0-6			CC-GFL		
	2 Elective hours *(if needed)*	0-2			PR		

Graduation Requirements Summary

Minimum Total Hours	Minimum Major Requirements Hours	College & Program Requirements Hours	Carolina Core Hours	Minimum Institutional GPA
120	27	57-59	34-41	2.00

1. Regardless of individual course grades, students must maintain a minimum 2.00 cumulative GPA.
2. Some colleges require a minimum GPA for major courses. Courses indicated in this column are included in the Computer Information Systems program GPA of 2.00.
3. Students who place into MATH 111 or 115 will be required to successfully complete it before taking MATH 122 or 141.
4. The Carolina Core provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students. Students in the College of Engineering and Computing are required to demonstrate proficiency in one foreign language equivalent to the 121 course by 1) a score of two or better on the foreign language placement test; or 2) completion of the 109 and 110 courses in FREN, GERM, LATN, or SPAN or completion of the 121 course in another foreign language. Students who do not place out of the GFL requirement may need to take additional hours to meet this requirement.
5. Students in the Computer Information Systems program are required to complete a minor in **Business Information Management** (18 hours), including any two of the following electives (6 hours): **ACCT** 324 – Survey of Commercial Law; **ECON** 311 – Issues in Economics; ECON 379 – Government Policy Toward Business; **FINA** 333 – Finance and Markets; **IBUS** 301 – Introduction to International Business; **MGMT** 373 – Entrepreneurship and New Venture Opportunities; **MKTG** 350 – Principles of Marketing; MKTG 351 – Consumer Behavior; **MGSC** 395 – Operations Management.
6. **Liberal Arts Electives** (9 hours) include: **AERO** 401, 402; **AFAM** 201-580; **ANTH** 100-499; **ARMY** 401, 402; **ARTE** 101, 260; ARTH 105-366; **ARTS** 103-261; **CHIN** 103-550; **CLAS** 220-598; **CPLT** 150-597; **CRJU** 101-494; **DANC** 101-381; **ECON** 123-499; **ENGL** 270-499; **FAMS** 180-597; **FREN** 109-615; **GEOG** 103-595; **GERM** 109-615; **HIST** 101-692; **ITAL** 101-615; **JAPA** 121-500; **LASP** 201-451; **LATN** 109-615; **LING** 101-600, but only one of LING 300, LING 301, and LING 600 can be used; **MART** 110-341; **MUSC** 110-140; **NAVY** 401, 402; **PHIL** 101-109, 112-598; **POLI** 101-499; **PORT** 121-615; **PSYC** 101-499; **RELG** 101-552; **RUSS** 121-616; **SOCY** 101-499; **SOST** 101-500; **SPAN** 109-615; **THEA** 170-565; **WGST** 112-555.
7. **Computer Information Systems Major Elective** (3 hours): **ITEC** 447, 560 or an approved **CSCE** course, 510 and higher.

Program Notes:

- Courses identified as "critical" may affect time to graduation due to prerequisite requirements for subsequent required courses.
- All undergraduate students must take a 3-credit course or its equivalent with a passing grade that covers the founding documents. This course may fulfill any requirement in the program of study. Courses that meet this requirement are listed in the academic bulletin.
- No Carolina Core, Lower Division Computing, Computer Science Major, or Computer Science Elective course may be counted toward a minor or application area. All other degree-required courses and electives may be used for a minor as appropriate.
- A student cannot repeat courses from the College of Engineering and Computing in which they earned a grade of C or better. In addition, a student cannot repeat any course from the College a second time. No more than four courses from the College of Engineering and Computing may be repeated in order to satisfy the requirements for any degree from the College, regardless of satisfactory work. For this purpose, withdrawal from a course with a grade of **W** is not regarded as enrollment in that course. A student that does not satisfactorily complete a degree-required College course within two attempts must change major or transfer out of the College of Engineering and Computing.
- Students may choose to complete a concentration in Artificial Intelligence (12 hours) or Cybersecurity (6 hours) in place of the major elective. More details are available in the Bulletin.
- The last 25% of a student's degree must be completed in residence at the University, and at least half of the hours in the student's major courses and in the student's minor courses (if applicable) must be taken at the University.
- Disclaimer: Prerequisites on courses are subject to change. Please refer to Bulletin.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the Carolina Core page on the University website.

Codes:			
CC	Carolina Core	**CC-INF**	Carolina Core – Information Literacy
CC-AIU	Carolina Core-Aesthetic and Interpretive Understanding	**CC-INT**	Carolina Core – Integrative Course
CC-ARP	Carolina Core-Analytical Reasoning and Problem-Solving	**CC-SCI**	Carolina Core – Scientific Literacy
CC-CMS	Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component	**CC-VSR**	Carolina Core – Values, Ethics, and Social Responsibility
CC-CMW	Effective, Engaged, and Persuasive Communication: Written Component	**CR**	College Requirement
CC-GFL	Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language	**MR**	Major Requirement
CC-GHS	Carolina Core – Historical Thinking	**PR**	Program Requirement
CC-GSS	Carolina Core – Social Sciences		

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.