Computer Science, B.S.
2023–24 Catalog

GEORGIA COLLEGE & STATE UNIVERSITY

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This example plan is designed to provide a blueprint for students to complete their degrees within four years. It includes recommended sequences of courses. Individual plans will vary based on previously earned credit, such as Dual Enrollment and AP credit, as well as the student's academic goals. Students will work with an academic advisor to develop a more individualized plan to complete their degree.

This example four-year plan is applicable to students admitted during the 2023–24 academic year.

Total Credits Required: 120 credits
Required GPA for Graduation: 2.0 (institutional)

Courses requiring a C or better are denoted with an asterisk (*). Courses only offered in the fall semester are denoted with a plus sign (+).
Courses only offered in the spring semester are denoted with a double-plus sign (++).
Legend is available on the last page of this document.

Year 1							
Fall				**Spring**			
Course	**Title**	**Hours**	**Area**	**Course**	**Title**	**Hours**	**Area**
BIDS 1705	First-Year Academic Seminar	1		ENGL 1102*	English Composition II	3	A
ENGL 1101*	English Composition I (pre-req to ENGL 1102)	3	A	MATH 1261*	Calculus I (pre-req to MATH 1262 and 2150)	4	D
MATH 1113*	Pre-Calculus (pre-req to MATH 1261 and CSCI 3680)	4	A	CSCI 1302*	Computer Science II (pre-req to CSCI 2350, 2800, 3211, 3410, and 3680)	3	F
CSCI 1301*	Computer Science I (pre-req to CSCI 1302)	3	F	GC1Y 1000	Critical Thinking (student's choice) (pre-req to GC2Y 2000)	3	B
Core Area E	Social Science (student's choice)	3	E	Core Area C	Fine Arts (student's choice)	3	C
Semester Hours		**14**		**Semester Hours**		**16**	
Notes:	Area A and GC1Y 1000 must be completed by 30 earned hours. First-Year Seminar does not count toward 120 hours required for graduation. Qualified students may start with MATH 1261: Calculus I instead of MATH 1113: Pre-Calculus. This course will also satisfy the pre-requisite for CSCI 3680.						

Year 2							
Fall				**Spring**			
Course	Title	Hours	Area	Course	Title	Hours	Area
MATH 1262*	Calculus II (pre-req to MATH 2263, 3030, and 4600)	4	Cognate	MATH 2150*	Linear Algebra (see Notes below)	3	Cognate
CSCI 2350*	Programming II (pre-req to CSCI 3341 and 3610; pre-req or co-req to CSCI 3211)	3	F	CSCI 3410*	Data Structures (pre-req to CSCI 3341, 3610, 4330, 4520, 4710, and 4950)	3	Major
CSCI 3211*+	Assembly Language and Digital Logic Design (pre-req to CSCI 3212)	3	Major	Core Area D	Science with Lab (student's choice)	4	D + Cognate
CSCI 3680*+	Discrete Structures (pre-req to CSCI 4520)	4	F	GC2Y 2000	Global Perspectives (student's choice)	4	B
				CSCI 2810*++	IS/CS Professional Development	1	Major
Semester Hours		**14**		**Semester Hours**		**15**	
Notes:	GC2Y 2000 must be taken between 30–59 earned hours. MATH 2150 can be substituted by MATH 2263: Calculus III, MATH 3030: Foundations of Math, or MATH 4600: Probability. Any Science with Lab course that satisfies Core Area D for science majors will also satisfy the cognate area requirement for the Computer Science major. See catalog for a complete list of course options.						

Year 3							
Fall				**Spring**			
Course	Title	Hours	Area	Course	Title	Hours	Area
CSCI 3342*+	Systems & Network Programming (pre-req to CSCI 3343)	3	Major	CSCI 3212*++	Computer Organization and Architecture (pre-req or co-req to CSCI 3341)	3	Major
CSCI 4520*+	Analysis of Algorithms	3	Major	CSCI 3341*++	Operating Systems (pre-req to CSCI 3342 and 3343)	3	Major
CSCI 2811*+	IS/CS Career Preparation	1	Major	CSCI 2800*++	Social & Professional Issues	3	F
Core Area D	Science with Lab (student's choice)	4	D + Cognate	CSCI Elective*	3000- or 4000-level CSCI elective	3	Major
Core Area E	Social Science (student's choice)	3	E	Core Area E	Social Science (student's choice)	3	E
Semester Hours		**14**		**Semester Hours**		**15**	
Summer	CSCI 4960: Internship should be completed during the summer between Year 3 and Year 4.						

Year 4							
Fall				**Spring**			
Course	**Title**	**Hours**	**Area**	**Course**	**Title**	**Hours**	**Area**
CSCI 4710*+	Databases (pre-req to CSCI 4320)	3	Major	CSCI 4320*++	Software Engineering	3	Major
CSCI 4330*+	Programming Languages: Design and Survey	3	Major	CSCI 3343*++	Computer Systems Security	3	Major
CSCI Elective*	3000- or 4000-level CSCI elective	3	Major	CSCI 4920*	Senior Seminar	3	Major
Core Area C	Humanities and Ethics (student's choice)	3	C	CSCI 4950* or CSCI 4999*	Special Topics or Undergraduate Research	3	Major
Gen Elective	Any general elective course	3	Elective	Gen Elective	Any general elective course	3	Elective
Semester Hours		**15**		**Semester Hours**		**15**	
Notes:	CSCI 4950 or CSCI 4999 is only required for students who do not complete a credit-earning summer internship (CSCI 4960). Students who complete an internship may need to replace this class in order to meet credit hour requirements. The 120 credit hours required to graduate may be met through electives, study abroad, selecting a concentration in Data Science or Information Technology, or selecting a minor.						

Legend	
Area	**This section of the plan references the area of the curriculum the course fulfills.**
A	Core Area A: Essential Skills
B	Core Area B: Institutional Options
C	Core Area C: Humanities, Ethics, and Fine Arts
D	Core Area D: Science, Technology, and Math
E	Core Area E: Social Sciences
F	Core Area F: Major Directed Core Requirements
Major	Computer Science Major Requirements
Elective	Course(s) a student selects. Hours are needed to meet overall graduation hours. Number of electives varies per major. Electives can be used towards GC Journeys, minors, or professional/graduate school pre-requisites, or to take courses of interest.
Cognate	Cognate courses are required courses within a student's curriculum. These courses are connected to the major but may be from other academic disciplines.