

Bachelor of Science Computer Science

The following outlines those courses that are required for the Bachelor of Science degree in Computer Science. Of particular importance in the listing is the sequence of computer science and mathematics courses. Students deviating from the suggested listing should be aware of course prerequisites and that all courses are not conducted each semester. Consultation with an academic advisor in computer science is strongly recommended prior to making changes to the suggested course sequence.

3

15

First Semester Freshman				
Cat. No.	Course	Hours		
CSC 1104	Foundations I	4		
CSC 1104L	Foundations I Lab	0		
GEN 1031	Henderson Seminar	1		
	English	3		
	Physical Well Being	1		
	Social Sciences	3		

Total Hours

Elective

Cat. No.	Course	Hours
CSC 1114	Foundations II	4
CSC 1114L	Foundations II Lab	0
COM 2013	Oral Communications	3
	English	3
	Social Sciences	3
	Fine Arts & Humanities	3
	Total Hours	16

First Semester Sophomore			
Cat. No.	Course	Hours	
CSC 2173	Assembler Language	3	
CSC 2203	Data Structures	3	
MTH 1261	Mathematical Computing	1	
MTH 1295	Calculus I	5	
	Fine Arts & Humanities	3	
	Total Hours	15	

Second Semester Sophomore				
Cat. No.	Course	Hours		
CSC 3223	Algorithms	3		
CSC 3443	Organization	3		
MTH 2045	Calculus II	5		
	Biological or Life Science	4		
Total Hours 15				

First Semester Junior			
Cat. No.	Course	Hours	
CSC 3193	Operating Systems	3	
CSC 3463	Software Engineering	3	
MTH 2283	Discrete Mathematics I	3	
ENG 3613	Technical Writing	3	
	Social Sciences	3	
	Total Hours	15	

Second Semester Junior			
Cat. No.	Course	Hours	
CSC 3133	Database Theory	3	
CSC 3453	Programming Languages	3	
CSC	Jr/Sr CompSci Elective	3	
STA 2323	Statistical Methods	3	
	Non-Western Culture	3	
	Total Hours	15	

First Semester Senior			
Cat. No.	Course	Hours	
CSC 3433	Computational Complexity	3	
CSC 3472	Technology & Society	2	
CSC	Jr/Sr CompSci Elective	3	
MTH	Jr/Sr Math Elective	3	
	Science Sequence I	4	
	Total Hours	15	

Second Semester Senior			
Cat. No.	Course	Hours	
CSC 4483	Capstone	3	
CSC	Jr/Sr CompSci Elective	3	
COM 3813	Business & Prof. Comm.	3	
	Elective	1	
	Science Sequence II	4	
	Total Hours	14	

Liberal Arts Core Requirements (45 hours): (consult university catalog for current requirements)

Essential Skills (13 hours)

English (6 Hours) (Students must pass English courses with a grade of "C" or above.)

Required: **FNG 1463** English A*

Choose One: ENG 1473 English B **FNG 1803** Honors English

Communication (3 hours)

Required: COM 2013 Oral Communication

Mathematics (3 hours)

Choose One*: MTH 1033 Mathematics for Liberal Arts MTH 1083 Math through Practical Applications

MTH 1243 College Algebra MTH 1253 Plane Trigonometry

MTH 1273 Precalculus Mathematics

Physical Well-Being (1 hour)

Choose One*: HPR 1011 Life Fitness Concepts HPR 1xx1 PE Activity Course MSC 1011 Introduction to ROTC MSC 1021 Introduction to Leadership

Academic Enrichment (23 hours)

Fine Arts and Humanities (6 hours)

Choose One:	ENG 2013	World Literature I	ENG 2023	World Literature II
	ENG 2683	Masters of Western Literature	ENG 2793	Masters of Western Literature Honors
Choose One:	ART 2033	Humanities: Art	MUS 2033	Humanities: Music
	THA 2033	Humanities: Theatre Arts	HUM 2093	Fine Arts Honors
	ART 2603	Humanities: Studio Art		

Soci

ial Sciences	(9 hours)			
Choose One:	HIS 1013	Civilization to 1660	HIS 1023	Civilization since 1660
	HIS 1043	Civilization since 1660 Honors		
Choose One:	HIS 2053	United States to 1865	HIS 2063	United States since 1865
	PSC 1013	American National Government		
Choose One*:	ANT 2013	Intro. to Cultural Anthropology	ECO 2013	Macroeconomics
	ECO 2023	Microeconomics	GEO 1023	Introduction to Geography
	GEO 2163	World Geography	PSC 1023	State and Local Government
	PSY 1013	General Psychology	PSY 1073	General Psychology Honors
	SOC 1013	Intro to Sociology		

^{*} Or any Civilization, US History, or American National Government course listed above not used to fulfill another requirement

Natural Science (8 hours)

Choose One:	BIO 1013/1021	Intro. to Biology (with lab)	BIO 2104	General Botany
Choose One:	BIO 2114 CHM 1004	General Zoology Intro. to Chemistry	CHM 1014	University Chemistry I
	CHM 1034	General Chemistry Non-Majors	CHM 1044	General Organic and Biochemistry
	PHY 1024 PHY 2234	Introduction to Astronomy University Physics I	PHY 2034	General Physics I

Other (9 hours)

Non-Western Culture (3 hours)

Choose One:	ANT 3043	North American Indians	ANT 3053	World Cultures
	ART 3103	Art of the Nonwestern World	EDU 4543	Teaching People of Other Cultures
	ENG 3043	Nonwestern Literature	GEO 3173	Geography of the Pacific
	HIS 4673	Asian Civilizations	HIS 4683	The Modern Middle East
	HIS 4693	African History	HPR 3973	History of Nonwestern Leisure
	MUS 3473	Survey of Nonwestern Music	NSG 3643	Trans-cultural Health Care
	PHI 3023	Religions of the World	PHY 4293	Nonwestern Cosmology
	PSC 4233	Comp. Pol. in the Mid. East	PSC 4243	Comp. Politics in Africa
	PSC 4253	South Asian Politics	PSY 3043	Cross-Cultural Psychology
	PSY 3053	Multicultural Mental Health	SOC 3063	World Cultures
	GEN 3083	Study Abroad: Non-Western		

Core Elective (3 hours)

Choose One*:	PHI 2013	Introduction to Philosophy	PHI 2083	Introduction to Philosophy Honors
	PHI 3043	Ancient Philosophy	PHI 3053	Modern Philosophy
	PHI 3113	Ethics	FRE 1013	French I (or higher level)
	GER 1013	German I (or higher level)	SPA 1013	Spanish I (or higher level)

^{*} Or any course listed in the Liberal Arts Core that has not been used to fulfill any other category.

Writing Across the Curriculum Requirements (3 hours)

Choose One*:	ENG 3313	University Writing	ENG 4453	Advanced Composition
	ENG 3613	Technical Writing	MMC 4223	Magazine & Feature Writing
	MMC 4293	Creative Nonfiction		

^{*} Writing Intensive (WI) Requirement. While not part of the Liberal Arts Core, each student must take a minimum of two 3000- or 4000- level Writing Across the Curriculum courses in addition to one of the courses listed directly above. One must be taken within the department of the student's major; the other may be from the major, the minor, the liberal arts core or an elective. Approved courses are identified with "WI." The courses must be passed with a grade of "C" or above.

Additional Requirements: (consult latest university catalog for most current requirements)

- While not part of the Liberal Arts Core, GEN 1031 Henderson Seminar is required of all freshmen during the first semester. Students who fail the class have the option to retake it during their second semester. This course must be taken at the freshman level.
- No more than seven (7) hours of "D" may be counted in the Liberal Arts Core.
- In order to obtain a bachelor's degree, a minimum of 124 semester hours of work must be completed with a passing grade and a minimum GPA of 2.00 must be met on all work.
- A total of forty-two (42) semester hours of credit must be earned from junior- and/or senior-level courses.

Students with a score of 25 or higher on the English and Reading sections of the ACT will be awarded credit for ENG 1463 after completion of 15 hours at Henderson with a 2.00 or higher GPA, and after completion of ENG 1473 with a grade of "C" or above.

^{*} Alternatively, any mathematics course as sophisticated as College Algebra may be substituted.

^{*} Alternatively, one year or more of active duty military service will satisfy this requirement.