

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.

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
	Elective/Minor	3
Total Hours		15

Second Semester Freshman

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 1294	Calculus I	4
	Fine Arts & Humanities	3
	Social Sciences	3
Total Hours		16

Second Semester Sophomore

Cat. No.	Course	Hours
CSC 3223	Algorithm Analysis	3
CSC 3443	Computer Organization	3
MTH 2044	Calculus II	4
	Biological or Life Science	4
Total Hours		14

First Semester Junior

Cat. No.	Course	Hours
CSC 3193	Operating Systems	3
CSC 3463	Software Engineering	3
MTH 2283	Discrete Mathematics	3
ENG 3613	Technical Writing	3
	Non-Western Culture	3
Total Hours		15

Second Semester Junior

Cat. No.	Course	Hours
CSC 3133	Database Theory	3
CSC 3453	Programming Languages	3
CSC	Jr/Sr Computer Science	3
STA 2323	Statistical Methods	3
	Elective/Minor	3
Total Hours		15

First Semester Senior

Cat. No.	Course	Hours
CSC 3433	Computational Complexity	3
CSC 3472	Technology & Society	2
CSC	Jr/Sr Computer Science	3
MTH	Jr/Sr Mathematics	3
	Science Sequence I	4
Total Hours		15

Second Semester Senior

Cat. No.	Course	Hours
CSC 4483	Capstone	3
CSC	Jr/Sr Computer Science	3
COM 3813	Business & Prof. Comm.	3
	Elective/Minor	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: ENG 1463 English A*
Choose One: ENG 1473 English B ENG 1803 Honors English

* 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.

Communication (3 hours)

Required: COM 2013 Oral Communication

Mathematics (3 hours)

Choose One: MTH 1033 Mathematics for Liberal Arts MTH 1243 College Algebra
MTH 1253 Plane Trigonometry MTH 1273 Precalculus Mathematics

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

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

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

Academic Enrichment (23 hours)

Fine Arts and Humanities (6 hours)

Choose One: ENG 2013 World Literature I ENG 2023 World Literature II
ENG 2883 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

Social 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 1877 HIS 2063 United States since 1877
PSC 1013 American National Government PSC 1263 American National Government Honors
Choose One: ANT 2013 Intro. to Cultural Anthropology CRJ 2013 Intro to Criminal Justice System
CRJ 2033 Intro. to Criminology 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
BIO 2114 General Zoology
Choose One: CHM 1004 Intro. to Chemistry CHM 1014 University Chemistry I
CHM 1034 General Chemistry Non-Majors CHM 1044 General Organic and Biochemistry
CHM 1234 Intro. to Forensic Science PHY 1024 Introduction to Astronomy
PHY 2034 General Physics I PHY 2234 University Physics I

Other (9 hours)

Non-Western Culture (3 hours)

Choose One: ANT 3043 North American Indians ANT 4053 World Cultures
ART 4103 Art of the Nonwestern World BIO 4044 Neotropical Ecology
EDU 4543 Teaching People of Other Cultures ENG 3043 Nonwestern Literature
GEN 4083 Study Abroad: Non-Western 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 PHI 4203 Asian Philosophy
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 4063 World Cultures THA 3483 Theatre of the Nonwestern World

Core Elective (3 hours)

Choose One: FCS 2103 Nutrition FRE 1013 French I (or higher level)
GER 1013 German I (or higher level) HUM 2153 Intro. Women's and Gender Studies
PHI 2013 Introduction to Philosophy PHI 2083 Introduction to Philosophy Honors
PHI 3113 Ethics PHI 4043 Ancient Philosophy
PHI 4053 Modern Philosophy 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 3613 Technical Writing
ENG 4453 Advanced Composition HIS 3383 Writing History
MMC 4223 Magazine & Feature Writing MMC 4293 Creative Nonfiction
NSG 3603 Healthcare Research

* Writing Intensive (WI) Requirement. While not part of the Liberal Arts Core, each student must take one additional 3000- or 4000- level writing intensive course in the major area of study. 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 120 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.