HENDERSON
S T A T E   U N I V E R S I T Y

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 exempt from 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.
Note: The Computer Science degree requirement of MTH1294 – Calculus I fulfills this core requirement.

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
	THA 2022	Ballet I	THA 2012	Theatre Dance I
	THA 2772	Jazz Dance I	THA 4552	Modern Dance

* 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 2053	Studies in Literature	ENG 2793	Masters of Western Literature Honors
Choose One:	ART 2033	Humanities: Art	ART 2603	Humanities: Studio Art
	HUM 2093	Fine Arts Honors	MUS 2033	Humanities: Music
	THA 2033	Humanities: Theatre Arts		

Social Sciences (9 hours)
Choose One:	HIS 1013	Civilization to 1660	HIS 1023	Civilization since 1660
	HIS 1043	Civilization since 1660 Honors	HIS 1323	Civilization to 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
	PSC 2193	Global Politics	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 Chemistry	PHY 1024	Introduction to Astronomy
	PHY 2034	General Physics I	PHY 2234	University Physics I

Note: The Computer Science degree requirement of CHM 1014/1024 – University Chemistry I/II, PHY 2034/2044 – General Physics I/II, or PHY 2234/2244 University Physics I/II fulfills this core requirement other than the biology requirement.

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
	BIO 4324	Tropical Marine Biology	EDU 4543	Culturally Diverse Learners
	ENG 3043	Nonwestern Literature	GEN 4083	Study Abroad: Non-Western
	GEO 3073	Geography of Asia	HIS 4253	African Kingdoms
	HIS 4273	Islam and the West	HIS 4303	Sex and Gender in Africa
	HIS 4343	Africa in the American South	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 3043	North American Indians
	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.
Note: The Computer Science degree requirements fulfill this core requirement.

Writing Across the Curriculum Requirements (3 hours)
Choose One*:	COM 4063	Magazine & Feature Writing	COM 4293	Creative Nonfiction
	ENG 3313	University Writing	ENG 3613	Technical Writing
	ENG 4453	Advanced Composition	HIS 3383	Writing History
	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.
Note: The Computer Science degree requirement of ENG 3613 – Technical Writing fulfills this core requirement.

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.