

ACCELERATED 4+1 COMPUTER SCIENCE (GENERAL CS CONCENTRATION), BS MS

The University Core Curriculum is the same across all undergraduate bachelor's programs. Please consult the academic advisor for your designated major before selecting courses in this area.

Code	Title	Hours
	General Education Core Curriculum (p. 1)	42
	Major Requirements (p. 1)	79
	Other Requirements (p. 1)	20
Total Hours		141

General Education Core Curriculum (Standard)¹

Code	Title	Hours
Communication		
ENGL 1301	Freshman English I	3
ENGL 1302	Freshman English II	3
Mathematics		
MATH 2312	Precalculus Math	3
Life and Physical Sciences		
CHEM 1311	Chemistry I	3
PHYS 1301	College Physics I	3
Language, Philosophy, and Culture		
ENG 2XX ²		3
Creative Arts		
MUSI 1306	Music Appreciation	3
American History		
HIST 1301	Soc & Pol Hist US to 1877	3
HIST 1302	Soc & Pol Hist US Since 1877	3
Government/Political Science		
POLS 2305	American Government	3
POLS 2306	Texas Government	3
Social and Behavioral Sciences		
ECON 2301	Principles Of Economics I	3
Institutional Options		
COMM 1321	Business & Professional Comm	3
CS 120	Introduction to Programming Using C++	3
Total Hours		42

¹

Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

²

ENGL 2332 World Literature I, ENGL 2333 World Literature II, ENGL 2326 American Literature, or ENGL 2328 African-American Literature

Major (Computer Science)

Code	Title	Hours
CS 124	Fund Machine Computation	3
CS 140	Computer Programming in Java	3
CS 241	Advanced OOP Using C++	3
CS 243	Computer Organization	3
CS 246	Data & File Structures	3
CS 248	Theory of Computation	3
CS 250	Computer Networks Fundamentals	3
CS 342	Prog Lang & Design	3
CS 343	Assembly & Comp Archi	3
CS 346	Database Mgmt System	3
CS 415	Comp Ethics & Society	3
CS 444	Operating Systems	3
CS 456	Soft Eng	3
CS 499	Capstone Proj	3
CS 3xx or 4xx		3
CS 4xx Elective		3
CS 511	Alg Anal & Data Str	3
CS 531	Comp Arch	3
CS 541	Operating Systems	3
CS 551	Theory of Computation	3
CS 599	Graduate Seminar Computer Sci	1
CS 698	Mst Thes/Rsch I (or CS 500/CS 600 Elective)	3
CS 697	Independent Master's Prjt	3
or CS 699	Mst Thes/Rsch II	
CS 500/CS 600 Elective		3
CS 500/CS 600 Elective		3
CS 500/CS 600 Elective		3
CS 500/CS 600 Elective		3
Total Hours		79

Other Requirements

Code	Title	Hours
MATH 2413	Calculus & Analytic Geomtry I	4
MATH 2414	Calculus&Analytic Geometry II	4
MATH 250	Linear Algebra	3
MATH 473 & MATH 345	Probability & Statistics I and Applied Mathematics and Statistics for Scientists and Engineers	6
PHYS 213	College Phys Lab I	1
PHYS 214	College Phys Lab II	1
PHYS 1302	College Physics II	3
FS 102	Freshman Seminar/ first Year Experience	1
Total Hours		23

Course	Title	Hours
First Year		
First Semester		
CS 120	Introduction to Programming Using C++	3
MATH 2312	Precalculus Math	3
CHEM 1311	Chemistry I	3

ENGL 1301	Freshman English I	3
MUSI 1306	Music Appreciation	3
FS 102	Freshman Seminar/ first Year Experience	1
Hours		16

Second Semester

CS 124	Fund Machine Computation	3
CS 140	Computer Programming in Java	3
MATH 2413	Calculus & Analytic Geomtry I	4
ENGL 1302	Freshman English II	3
COMM 1321	Business & Professional Comm	3
Hours		16

Second Year**Third Semester**

CS 241	Advanced OOP Using C++	3
CS 243	Computer Organization	3
CS 250	Computer Networks Fundamentals	3
MATH 2414	Calculus&Analytic Geometry II	4
PHYS 213	College Phys Lab I	1
PHYS 1301	College Physics I	3
Hours		17

Fourth Semester

CS 246	Data & File Structures	3
CS 248	Theory of Computation	3
POLS 2305	American Government	3
MATH 250	Linear Algebra	3
PHYS 214	College Phys Lab II	1
PHYS 1302	College Physics II	3
Hours		16

Third Year**Fifth Semester**

CS 342	Prog Lang & Design	3
CS 343	Assembly & Comp Archi	3
MATH 345 & MATH 473	Applied Mathematics and Statistics for Scientists and Engineers and Probability & Statistics I	6
HIST 1301	Soc & Pol Hist US to 1877	3
ENG 2XX Any 200 Level ENG may be selected		3
Hours		18

Sixth Semester

CS 346	Database Mgmt System	3
CS 300/400 CS Elective		3
POLS 2306	Texas Government	3
HIST 1302	Soc & Pol Hist US Since 1877	3
ECON 2301	Principles Of Economics I	3
Hours		15

Fourth Year**Seventh Semester**

CS 444	Operating Systems	3
CS 415	Comp Ethics & Society	3
CS 4XX (Elective)		3
CS 5XX (Core)		3

CS 500/600 Elective		3
Hours		15

Eighth Semester

CS 456	Soft Eng	3
CS 499	Capstone Proj	3
CS 5XX (Core)		3
CS 500/600 Elective		3
Hours		12

Fifth Year**Ninth Semester**

CS 5XX (Core)		3
CS 5XX (Core)		3
CS 599	Graduate Seminar Computer Sci	1
Select one of the following:		3
CS 500/600 elective		
CS 698	Mst Thes/Rsch I	
Hours		10

Tenth Semester

CS 697 or CS 699	Independent Master's Prjt or Mst Thes/Rsch II	3
CS 500/600 Elective		3
CS 500/600 Elective		3
Hours		9
Total Hours		144