BSCS - COMPUTER SCIENCE (SOFTWARE ENGINEERING CONCENTRATION)

Degree Requirements: BSCS - Computer Science Major (Software Engineering Concentration)

Code	Title	Hours
Required Courses		
Minimum 124 hours including the following:		
Literature and Writing		
ENG 1310	Research Writing: Writing and Academic Inquiry Seminars	3
PWR 3300	Technical Writing	3
Great Text Requirements		
Choose one of the following courses:		3
GTX 2301	Intellectual Traditions of the Ancient World : Literature and Thought	
GTX 2302	Medieval Intellectual Traditions: Literature and Thought in Context	
GTX 3343	Great Texts in the Origins of Science	
GTX 4341	Great Texts in Modern Science	
English Literature Requirement		
Choose one of the following courses:		3
ENG 2301	British Literature	
ENG 2306	World Literature	
ENG 2310	American Literary Cultures	
Contemporary Social Issues		
Select 3 hours from the corresponding A&S Distribution List (HIS 1300 included)		
Contemporary Social Issues Distribution List (AS) (https://catalog.baylor.edu/undergraduate/college-arts-sciences/#csi)		3
Religion		
REL 1310	The Christian Scriptures	3
REL 1350	The Christian Heritage	3
Foreign Language and Culture		
Foreign Language and Culture Distribution List (ECS) (https://catalog.baylor.edu/undergraduate/school-engineering-computer-science/#EN-FLC-DL)		3
Other Requirements		
ECO 1305	Issues in Economics for Non-Business Majors	3
or ECO 2306	Principles of Microeconomics	
CSS 1301	Fundamentals of Public Communication	3
or CSS 1302	Speech for Business and Professional Students	
PSC 1387	The U.S. Constitution, Its Interpretation, and the American Political Experience (Approved GTX course may fulfill PSC 1387)	3
PHI 1310	Computer Ethics	3
Lifetime Fitness: Any two LF 11XX courses.		2
Chapel: Two Semesters		
Mathematics		
MTH 1321	Calculus I	3
MTH 1322	Calculus II	3
MTH 2311	Linear Algebra	3
or MTH 2321	Calculus III	
STA 3381	Probability and Statistics	3
Sciences		
Select one group from the following natural or physical sciences:		16
Group 1:		
BIO 1305 & BIO 1105	Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory	
BIO 1306 & BIO 1106	Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory	
Group 2:		
CHE 1301 & CHE 1101	Basic Principles of Modern Chemistry I and General Chemistry Laboratory I	
CHE 1302 & CHE 1102	Basic Principles of Modern Chemistry II and General Chemistry Laboratory II	
Group 3:		
GEO 1408	Earth Science	
GEO 1306 & GEO 1106	The Earth Through Time and The Earth Through Time, Laboratory	
Group 4:		
PHY 1408	General Physics for Natural and Behavioral Sciences I	
PHY 1409	General Physics for Natural and Behavioral Sciences II	
or		
PHY 1420	General Physics I	
PHY 1430	General Physics II	
Six to eight additional hours of science credit from the courses listed above or from courses that have one or more of the above courses as prerequisites. If a '1000' level course is chosen from the list above, the coordinating lab must be taken as well.		
Computer Science Major (Software Engineering Concentration)		
Required Courses		
CSI 1430	Introduction to Computer Science I with Laboratory	4
CSI 1440	Introduction to Computer Science II with Laboratory	4
CSI 2334	Introduction to Computer Systems	3
CSI 2350	Discrete Structures	3
CSI 3334	Data Structures	3
CSI 3335	Database Design and Applications	3
CSI 3336	Systems Programming	3
CSI 3344	Introduction to Algorithms	3
CSI 3471	Software Engineering I	4
CSI 3372	Software Engineering II	3
CSI 3373	Software Quality Assurance and Testing	3
CSI 3374	Software Project Management	3
CSI 3439	Computer Architecture	4
CSI 4321	Data Communications	3
CSI 4330	Foundations of Computing	3

CSI 4337	Introduction to Operating Systems	3
CSI 43C9	Capstone Design Project	3
Computer Science Electives		
Select one course from the following:		3
CSI 3324	Numerical Methods	
CSI 3338	Computer Organization	
CSI 3342	Principles of Software Design	
CSI 3V90	Special Topics in Intermediate Computer Science	
CSI 3V95	Internship Experience	
CSI 4111	Cybersecurity Laboratory	
CSI 4144	Competitive Learning	
CSI 4322	Numerical Analysis	
CSI 4323	Introduction to Cybersecurity	
CSI 4325	Advanced Cybersecurity	
CSI 4328	Numerical Linear Algebra	
CSI 4335	Database Design I	
CSI 4341	Computer Graphics	
CSI 4342	Gaming Platform Frameworks	
CSI 4344	Object-Oriented Development	
CSI 4352	Introduction to Data Mining	
CSI 4V96	Special Topics in Computer Science	
A grade of “C” or better is required in all computer science hours counted toward major.		
Total Hours		**124**