Southwest Baptist University

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING (STATISTICS CONCENTRATION)

FRESHMAN - FALL SEMESTER

Course	Title	Credits
ENG 1113	Communication: English Composition I	3
MAT 1195	Reasoning: Calculus I	5
UNI 1111	Opportunities: University Seminar	1
CIS 1033	Foundations of Computer Science	3
CIS 1163	Personal Cybersecurity	3
Total Credits	……………………………………..…	**15**

FRESHMAN - SPRING SEMESTER

Course	Title	Credits
ENG 2213 / ENG 3813	Communication: English Composition II or Communication: Professional Writing and Editing	3
UNI 1121	Reasoning: Introduction to Critical Thinking	1
DISCOVER	Enrichment: (Enrichment Options)	3
DISCOVER	Values: (Spiritual Formation Options)	2
CIS 1144	Computer Science I	4
MAT 1173	Discrete Mathematics	3
Total Credits	……………………………………..…	**16**

SOPHOMORE - FALL SEMESTER

Course	Title	Credits
ECO 2023	Society: Principles of Microeconomics	3
DISCOVER	Communication: (Communication Options)	3
DISCOVER	Discipline: (Discipline Options)	3
CIS 1154	Computer Science II	4
MAT 3343	Mathematical Statistics	3
Total Credits	……………………………………..…	**16**

SOPHOMORE - SPRING SEMESTER

Course	Title	Credits
DISCOVER	Inquiry: (Inquiry Options)*	4
CIS 1141	Introduction to Linux and Scripting	1
CIS 2003 or CIS 3553	Web and User Experience Design or Software Quality Assurance and Testing	3
CIS 2213	System Analysis and Design	3
CIS 2253	Full Stack Web Development	3
Total Credits	……………………………………..…	**14**

JUNIOR - FALL SEMESTER

Course	Title	Credits
DISCOVER or CIS 3313	Society: (American Studies Options) or Advanced System Analysis and Design	3
CIS 2013	Networking and Cloud Computing	3
CIS 3123	Survey of Data Science	3
CIS 3323	Database Management System Design	3
CIS 3412	Machine Organization	2
Total Credits	……………………………………..…	**14**

JUNIOR - SPRING SEMESTER

Course	Title	Credits
BIB 1013 or CIS 3033	Values: Old Testament History or Secure Software	3
CIS 2003 or CIS 3553	Web and User Experience Design or Software Quality Assurance and Testing	3
CIS 3333	Algorithms and Data Structures	3
CIS 3433 or CHOICE	Artificial Intelligence and Machine Learning or Mathematics Choice	3
CIS 3852	Computing Ethics and Professional Development	2
MAT 3473 or MAT 4343	Analysis of Variance or Mathematical Statistics II	3
Total Credits	……………………………………..…	**17**

SENIOR - FALL SEMESTER

Course	Title	Credits
BIB 1023	Values: New Testament History	3
DISCOVER or CIS 3313	Society: (American Studies Options) or Advanced System Analysis and Design	3
CIS 4462	Applied Software Engineering I	2
CIS 4981	Internship in Computing	1
MAT 3323	Linear Algebra	3
CHOICE	Mathematics Choice	3
Total Credits	……………………………………..…	**15**

SENIOR - SPRING SEMESTER

Course	Title	Credits
BIB 1013 or CIS 3033	Values: Old Testament History or Secure Software	3
DISCOVER	Values: (Cultural Awareness Options)	2
CIS 3433 or CHOICE	Artificial Intelligence and Machine Learning or Mathematics Choice	3
CIS 4423	Operating Systems	3
CIS 4472	Applied Software Engineering II	2
MAT 3473 or MAT 4343	Analysis of Variance or Mathematical Statistics II	3
Total Credits	……………………………………..…	**16**

DISCOVER Core Curriculum
*Major Requirements

Total Credits to Graduate: 123

Updated Spring 2025