Southwest Baptist UNIVERSITY

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING
(WITH STATISTICS MINOR)

FRESHMAN - FALL SEMESTER

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

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

SOPHOMORE - FALL SEMESTER

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

DISCOVER	Inquiry: (Inquiry Options)	4
CIS 2012 or CIS 3553	Networking and Cloud Computing or Software Quality Assurance and Testing	3
CIS 2213	System Analysis and Design	3
CIS 3333	Algorithms and Data Structures	3
MAT 3332	Symbolic Logic and Set Theory	2
Total Credits	………………………………….............	**15**

JUNIOR - FALL SEMESTER

BIB 1013	Values: Old Testament History	3
CIS 3323	Database Management Systems Design	3
CIS 3412	Machine Organization	2
BUS 4031	Professional Development	1
BUS 4041	Ethics Seminar	1
CIS 3313 or CHOICE	Advanced System Analysis and Design or Management Choice (upper-level)	3
CHOICE	Mathematics/Science Choice	4
Total Credits	………………………………………..........	**17**

JUNIOR - SPRING SEMESTER

CIS 2012 or CIS 3553	Networking and Cloud Computing or Software Quality Assurance and Testing	2
CIS 3033 or CIS 3123	Secure Software or Survey of Data Science	3
CIS 3433 or CIS 4423	Artificial Intelligence and Machine Learning or Operating Systems	3
CIS 4981	Internship in Computing	1
CIS 2253	Full Stack Web Development	3
MAT 3473 or MAT 4343	Analysis of Variance or Mathematical Statistics II	3
Total Credits	………………………………….............	**15**

SENIOR - FALL SEMESTER

BIB 1013	Values: New Testament History	3
DISCOVER	Society: (American Studies Options)	3
CIS 3313 or CHOICE	Advanced System Analysis and Design or Management Choice (upper-level)	3
CIS 4462	Applied Software Engineering I	2
CIS 4981	Internship in Computing	1
MAT 3323	Linear Algebra	3
Total Credits	………………………………………..........	**15**

SENIOR - SPRING SEMESTER

DISCOVER	Values: (Spiritual Formation Options)	2
CIS 3033 or CIS 3123	Secure Software or Survey of Data Science	3
CIS 3433 or CIS 4423	Artificial Intelligence and Machine Learning or Operating Systems	3
CIS 4472	Applied Software Engineering II	2
CIS 4981	Internship in Computing	1
MAT 3473 or MAT 4343	Analysis of Variance or Mathematical Statistics II	3
Total Credits	………………………………….............	**14**

DISCOVER Core Curriculum

Total Credits to Graduate: 123

Updated Spring 2024