



Southwest Baptist UNIVERSITY

BACHELOR OF SCIENCE IN DATA SCIENCE

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 <i>or</i> ENG 3813	Communication: English Composition II <i>or</i> Professional Writing and Editing	3
UNI 1121	Reasoning: Introduction to Critical Thinking	1
DISCOVER	Discipline: (Discipline 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

DISCOVER	Enrichment: (Enrichment Options)	3
DISCOVER	Inquiry: (Inquiry Options)	4
CIS 1154	Computer Science II	4
MAT 3343	Mathematical Statistics	3

Total Credits 14

SOPHOMORE - SPRING SEMESTER

DISCOVER	Communication: (Communication Options)	3
CIS 2213	System Analysis and Design	3
CIS 3123	Survey of Data Science	3
CIS 3333	Algorithms and Data Structures	3
MAT 3473 <i>or</i> MAT 4343	Analysis of Variance <i>or</i> Mathematical Statistics II	3

Total Credits 15

JUNIOR - FALL SEMESTER

BIB 1013	Values: Old Testament History	3
ECO 2023	Society: Principles of Microeconomics	3
CIS 3323	Database Management Systems Design	3
CIS 2033 <i>or</i> CIS 4523	Principles of Information Assurance <i>or</i> Programming Analytics	3
CIS 3513 <i>or</i> ELECTIVE	Data Visualization <i>or</i> Student Selection	3

Total Credits 15

JUNIOR - SPRING SEMESTER

BIB 2013	Values: New Testament History	3
DISCOVER	Society: (American Studies Options)	3
CIS 2253	Full Stack Web Development	3
CIS 3433	Artificial Intelligence and Machine Learning	3
MAT 3473 <i>or</i> MAT 4343	Analysis of Variance <i>or</i> Mathematical Statistics II	3

Total Credits 15

SENIOR - FALL SEMESTER

DISCOVER	Values: (Spiritual Formation Options)	2
BUS 4031	Professional Development	1
BUS 4041	Ethics Seminar	1
CIS 2033 <i>or</i> CIS 4523	Principles of Information Assurance <i>or</i> Programming Analytics	3
CIS 3513 <i>or</i> ELECTIVE	Data Visualization <i>or</i> Student Selection	3
CIS 4462	Applied Software Engineering I	2
MAT 3323	Linear Algebra	3

Total Credits 15

SENIOR - SPRING SEMESTER

CIS 4472	Applied Software Engineering II	2
CIS 4533	Modeling for Data Science	3
ELECTIVE	Student Selection	10

Total Credits 15

DISCOVER Core Curriculum

Student Selection: Open Choice, Second Major Courses, or Minor Courses

Total Credits to Graduate: 120

Updated Spring 2024