

BACHELOR OF SCIENCE IN INFORMATICS (DATA SCIENCE MINOR)

Web Site: <https://twu.edu/informatics/undergraduate-programs/>

Degree Requirements

Total Semester Credit Hours (SCH): 120

Major: 43 SCH Minor: 18 SCH

Program Code: INFO.BS.DATASCI CIP Code: 11.0104.00

Texas Core Curriculum

Code	Title	SCHs
ENG 1013	Composition I	3
ENG 1023	Composition II	3
Mathematics		3
Life & Physical Sciences		6
Language, Philosophy, & Culture		3
Creative Arts		3
HIST 1013	History of the United States, 1492-1865	3
HIST 1023	History of the United States, 1865 to the Present	3
POLS 2013	U.S. National Government	3
POLS 2023	Texas Government	3
Social & Behavioral Sciences		3
CAO: Women's Studies		3
CAO: First Year Seminar, Wellness or Mathematics		3
Total SCHs		42

Courses Required for Major

Code	Title	SCHs
CSCI 1423 & CSCI 1421	Programming Fundamentals I and Programming Fundamentals I - Laboratory	4
CSCI 1513	Introduction to Informatics	3
CSCI 2493	Programming Fundamentals II	3
CSCI 3053	Data Structures	3
CSCI 3423	Database Management	3
CSCI 3513	Information Systems Project Management	3
CSCI 3603	Foundations of Data Science	3
CSCI 3703	Interface Design and Development	3
CSCI 4313	Networking and Data Communication	3
HS 3383	Legal and Ethical Issues in Health Informatics	3
LS 3053	Interdisciplinary Information Retrieval	3
MATH 1713	Elementary Statistics II	3
NURS 2213	Introduction to Health Informatics	3
CSCI 4923	Capstone in Interprofessional Informatics	3
Total SCHs		43

Courses Required for Minor

Code	Title	SCHs
Choose 18 SCH (approved by advisor)		18
CSCI 2513	Information Security and Ethics	
CSCI 3113	Fundamentals of SAS Programming	
CSCI 4303	Advanced Modeling and Visualization	
CSCI 4513	Data Warehousing	
CSCI 4623	Big Data and High Performance Computing	
CSCI 4723	Machine Learning	
CSCI 4823	Principles of Data Mining	
MATH 2014	Calculus I	
MATH 4013	Probability and Statistics	
Total SCHs		18

Departmental Requirements

Code	Title	SCHs
MATH 1703	Elementary Statistics I (may be applied from core)	3
Elective (to include 3 SCH global perspectives)		15
Total SCHs		18