

ACCELERATED B.S. IN DATA SCIENCE & INFORMATICS (DATA SCIENCE) / M.S. IN INFORMATICS (DATA SCIENCE)

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

Degree Requirements

Total Semester Credit Hours (SCH): 120

Major: 49 SCH Minor: 18 SCH

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

Students must maintain an overall GPA of 3.5 or higher while in the Accelerated B.S./M.S. program.

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 2513	Information Security and Ethics	3
CSCI 3053	Data Structures	3
CSCI 3513	Information Systems Project Management	3
CSCI 3703	Interface Design and Development	3
CSCI 4513	Data Warehousing	3
CSCI 4723	Machine Learning	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
Graduate Courses		
CSCI 5103	Fundamentals of Informatics	3
CSCI 5203	Database Systems	3
CSCI 5413	Data Communication Networks	3
Total SCHs		49

Courses Required for Minor

Code	Title	SCHs
CSCI 3113	Fundamentals of SAS Programming	3
CSCI 3423	Database Management	3
CSCI 3603	Foundations of Data Science	3
CSCI 4303	Advanced Modeling and Visualization	3
CSCI 4823	Principles of Data Mining	3
Graduate Courses		
CSCI 5673	Big Data: Management, Access, and Use (replaces CSCI 4623)	3
Total SCHs		18

Departmental Requirements

Code	Title	SCHs
MATH 1703	Elementary Statistics I (May be applied from core.)	3
Electives		
Upper-level CSCI (3000-4000 level) (With advisor's approval.)		6
Global Perspectives		3
Total SCHs		12