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# MASTER OF SCIENCE IN DATA SCIENCE & INFORMATICS (CLINICAL APPLICATIONS)

Web Site: https://twu.edu/informatics/graduate-program/

# **Degree Requirements**

*Effective July 29, 2024:* Students without a background in Informatics may be required to complete the proficiency foundational coursework CSCI 5001 and CSCI 5011 at the determination of the program coordinator.

# **Total Semester Credit Hours Required**

The degree program consists of a minimum of 33 semester credit hours (SCH) of graduate coursework, 12 of which are foundations in computer science and 21 of which are discipline-specific coursework, including three SCHs in software/statistical tools. The program is completed with an interprofessional, interdisciplinary capstone project.

### Recommended course sequence

- 1. Students requiring proficiency in courses CSCI 5003 and CSCI 5203 should complete these courses before enrolling in other classes.
- 2. CSCI 5103 should be taken in the first semester of study.
- 3. CSCI 5123 and CSCI 5573 should be taken in the first year of study.
- 4. NURS 5923 should be taken in the last semester of study.

All other courses may be taken in any sequence unless a required prerequisite is noted. Contact the advisor if you have any questions.

### **Required Courses**

Code	Title	SCHs		
Proficiency Courses (may be waived)				
CSCI 5003	Information Systems Infrastructure and Programming			
CSCI 5203	Database Systems			
Computer Science Core				
CSCI 5103	Fundamentals of Informatics	3		
CSCI 5123	Foundations of Information Systems Security	3		
CSCI 5573	Foundations of Data Science	3		
CSCI 5673	Big Data: Management, Access, and Use	3		
Total SCHs		12		

## **Application Area: Clinical Applications Option**

Code	Title	SCHs
NURS 5923	Capstone in Informatics	3
NURS 6933	Analysis of Nurse-Generated Data	3
Select five of the following		
MGT 5743	Project Management	
NURS 5123	Introduction to Applied Health Informatics	
NURS 5143	Application of Technology Enhanced Health Promotion	

Total	SCHs		21
NU	IRS 5593	Data Analytics for Health Promotion	
NU	IRS 5453	User Interface Design in Healthcare	
NU	IRS 5393	Application of Telehealth and Remote Monitoring	

### **Cooperative Education**

In order for coursework in Cooperative Education to be counted as degree credit, department and advisory committee approval must be received during the semester in which the course is taken. This approval is in addition to approval to enroll in Cooperative Education coursework. Only three semester credit hours of Cooperative Education may be counted toward the Master's degree.