# MASTER OF SCIENCE IN DATA SCIENCE & INFORMATICS (SPORTS)

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 30 semester credit hours (SCH) of graduate coursework, 12 of which are foundations in computer science and 18 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. CSCI 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.

| Code                                | Title                                                 | SCHs  |
|-------------------------------------|-------------------------------------------------------|-------|
| Proficiency Courses (may be waived) |                                                       |       |
| CSCI 5003                           | Information Systems Infrastructure and<br>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                          |                                                       | 12-18 |

#### Application Area: Sports Informatics Option

| Code       | Title                                                            | SCHs |
|------------|------------------------------------------------------------------|------|
| KINS 5293  | Technical Skills Analysis                                        | 3    |
| KINS 5303  | Coaching Tactical Skills                                         | 3    |
| KINS 5253  | Organization and Administration for Effective<br>Team Management | 3    |
| KINS 5203  | Theory of Coaching                                               | 3    |
| KINS 5243  | Sport Injury Prevention and First Aid                            | 3    |
| KINS 5753  | Capstone in Informatics                                          | 3    |
| Total SCHs |                                                                  | 18   |

### **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.