

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

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

Marketable Skills

Defined by the Texas Higher Education Coordinating Board's 60x30 Strategic Plan (<https://reportcenter.highered.texas.gov/agency-publication/miscellaneous/theccb-60x30-strategic-plan/>) as, "Those skills valued by employers that can be applied in a variety of work settings, including interpersonal, cognitive, and applied skills areas. These skills can be either primary or complementary to a major and are acquired by students through education, including curricular, co-curricular, and extracurricular activities."

- a. Consult with customers or other departments on project status, proposals, or technical issues, such as software system design or maintenance, software testing, and validation procedures, adapt to new hardware, or to upgrade interfaces and improve performance.
- b. Work effectively as a member of an interdisciplinary project team to coordinate database and project development, determine project scope and limitations, critically analyze issues, and solve problems.
- c. Develop and implement procedures for data management, data storage and retrieval while evaluating data quality, data security, data transfer, data analysis, modeling, and visualization.
- d. Plan, coordinate, and implement security measures to safeguard information in computer files against accidental or unauthorized damage, modification, or disclosure.
- e. Prepare reports or correspondence concerning project specifications, activities, or status.
- f. Demonstrate personal accountability and work habits, integrity, and ethical behavior.
- g. Demonstrate proficiency in the software tools to achieve the skills listed, including but not limited to Java, Python, Perl, SQL, NoSQL, R, Microsoft Project, Microsoft Visio, Tableau, SAS, SPSS, modeling software.