

UNIVERSITY OF NORTH TEXAS G. BRINT RYAN COLLEGE OF BUSINESS



MS IN INFORMATION SYSTEMS AND TECHNOLOGIES (STEM)

The Master of Science with a major in Information Systems and Technologies is designed to provide an appropriate base of knowledge for entry into the management of information systems or decision sciences profession. This STEM approved program is intended for those students who desire a strong, specialist degree in the management of information technology or decision sciences. Because of its specialization and focus, the MS in Information Systems and Technologies differs significantly from an MBA program, which is designed for those students who desire a more general management background.

CAREER POSSIBILITIES

Business Intelligence Architect | Business Analyst | Business Process Analyst | Data Warehousing Architect | BI Competency Center (BICC) Professional | Data/Information Architect | IT Business Solutions Analyst | Business Intelligence Developer | BI Architecture Developer | Predictive Modeler | Predictive Analytics Architect | Data Mining Analyst | Data Analyst | Social Media Analyst | Customer Analytics Modeler | Operations Research Analyst | Statistician

DEGREE REQUIREMENTS

FOUNDATION COURSES (15 HOURS)

BCIS 5110 (3 hrs.) Programming for Business
BCIS 5120 (3 hrs.) Information Systems Development
BCIS 5420 (3 hrs.) Foundations of Database Management
BCIS 5700 (3 hrs.) Information Systems & Technologies Capstone
BCIS 5740 (3 hrs.) Information Security Management

ELECTIVE COURSES (15 HOURS SELECTED FROM)

BCIS 5140 (3 hrs.) Artificial Intelligence in Business
BCIS 5160 (3 hrs.) Artificial Intelligence Governance and Risk Management
BCIS 5170 (3 hrs.) Designing AI Solutions for Business
BCIS 5540 (3 hrs.) Enterprise Systems Programming
BCIS 5550 (3 hrs.) Advanced Enterprise Systems Programming
BCIS 5560 (3 hrs.) Cybersecurity Governance & Risk Management
BCIS 5610 (3 hrs.) Enterprise Data Warehousing
BCIS 5620 (3 hrs.) Networking and Telecommunication
BCIS 5630 (3 hrs.) Information Technology Security
BCIS 5650 (3 hrs.) Emerging Information Technologies
BCIS 5660 (3 hrs.) Organizing and Managing IT Projects
BCIS 5670 (3 hrs.) International Issues in IT
BCIS 5680 (3 hrs.) Web-Based Systems Development
BCIS 5750 (3 hrs.) Blockchain for Business
BCIS 5760 (3 hrs.) Intro to Business Aspects of Digital Forensics
BCIS 5800 (3 hrs.) Cooperative Education Internship
DSCI 5240 (3 hrs.) Data Mining

DSCI 5330 (3 hrs.) Business Intelligence Foundations
DSCI 5350 (3 hrs.) Big Data Analytics
DSCI 5360 (3 hrs.) Data Visualization for Analytics
DSCI 5530 (3 hrs.) Ethics in Business Analytics



**READY TO APPLY? NEED TO GET
ADVISED?**

CONTACT A STAFF MEMBER IN THE GRADUATE PROGRAMS
OFFICE AT RCoBMasters@unt.edu OR CALL 940-369-8977

Course Sequence

| COURSE SEQUENCE | |
|---|---|
| FALL START | SPRING START |
| <u>Fall</u> BCIS 5110 Programming for Business* BCIS 5120 Information Systems Development* ELECTIVE 1 *Must take first semester | <u>Spring</u> BCIS 5110 Programming for Business* BCIS 5120 Information Systems Development* ELECTIVE 1 *Must take first semester |
| <u>Spring</u> BCIS 5420 Foundations of Database Management BCIS 5740 Information Security Management ELECTIVE 2 | <u>Summer (Optional)</u> BCIS 5420 Foundations of Database Management BCIS 5740 Information Security Management |
| <u>Summer (Optional)</u> ELECTIVE 3 ELECTIVE 4 | <u>Fall</u> ELECTIVE 2 ELECTIVE 3 ELECTIVE 4 |
| <u>Fall</u> BCIS 5700 Information Systems and Technologies Capstone (Must take last semester) ELECTIVE 5 | <u>Spring</u> BCIS 5700 Information Systems and Technologies Capstone (Must take last semester) ELECTIVE 5 |

The following tracks are suggested to provide students the opportunity to specialize and better prepare themselves for specific careers in information systems and technologies:

| TRACKS | | | | | |
|-----------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Elective | Information Security | Application & Platform Development | Data Management | Digital Technology Management | Analytics-Based Systems |
| 1 | BCIS 5620 | BCIS 5620 | DSCI 5330 | BCIS 5660 | DSCI 5240 |
| 2 | BCIS 5630 | BCIS 5630 | DSCI 5360 | BCIS 5670 | DSCI 5350 |
| 3 | BCIS 5680 | BCIS 5680 | BCIS 5680 | BCIS 5650 | DSCI 5360 |
| 4 (Select 1) | BCIS 5750 or BCIS 5760 | BCIS 5650 or BCIS/DSCI Elective | BCIS 5800 or BCIS/DSCI Elective | BCIS 5800 or BCIS/DSCI Elective | BCIS 5800 or BCIS/DSCI Elective |
| 5 (Select 1) | BCIS 5800 or BCIS/DSCI Elective | BCIS 5800 or BCIS/DSCI Elective | BCIS/DSCI Elective | BCIS/DSCI Elective | BCIS/ DSCI Elective |