

## GRADUATE CERTIFICATE IN BUSINESS INTELLIGENCE/ANALYTICS

### About the Major

The Graduate Certificate in Business Intelligence/Analytics was created to meet the increasing need for managers, scientists, and other decision-makers to interpret ever-increasing datasets. The curriculum is designed to equip students with the knowledge and skills necessary to effectively use available data for competitive advantage. It focuses on business analytics and data mining techniques for organizational decision making. This program requires a total of 15 credit hours.

### Program Format

This program's formats offer students to earn the certificate in 12-16 months. This program is available online and/or on-campus. On-campus classes are held on the main campus in Fort Lauderdale. Each class meets once a week from 6:00 p.m. to 8:00 p.m. for 16 weeks in the fall and winter terms and 14 weeks in the summer term.



### Career Opportunities

- Business Intelligence Analyst
- Business Intelligence Architect
- Data Warehouse/ BI Developer
- IT Business Analyst

# THE CURRICULUM - 15 TOTAL CREDITS

## Business Intelligence/Analytics

Students must take the five courses listed below. Each of these courses has prerequisite requirements which may be satisfied by taking the prerequisite courses listed in the course descriptions or by demonstrating equivalent experience or the completion of equivalent courses taken elsewhere.

### MMIS 671 Fundamentals of Analytics and Business Intelligence

This course examines concepts and methods central to analytics and business intelligence systems. The focus is on the application of management science and artificial intelligence techniques for prescriptive and predictive analytics. Case studies of existing systems are used to reinforce concepts discussed in class. A major component of the course is a project entailing the design, implementation, and evaluation of prototype systems for business intelligence applications.

### MMIS 630 Database Management and Applications

The application of database concepts to management information systems. Design objectives, methods, costs, and benefits associated with the use of a database management system. Tools and techniques for the management of large amounts of data. Database design, performance, and administration. File organization and access methods. The architectures of database systems, data models for database systems (network, hierarchical, relational, and object-oriented model), client-server database applications, distributed databases, and object-oriented databases.

### MMIS 642 Data Warehousing

Prerequisites: MMIS 630

This course includes the various factors involved in developing data warehouses and data marts: planning, design, implementation, and evaluation; review of vendor data warehouse products; cases involving contemporary implementations in business, government, and industry; techniques for maximizing effectiveness through OLAP and data mining.

### MMIS 643 Data Mining

Prerequisites: (MMIS 671 or QNT 5040) and MMIS 630

This course emphasizes the fundamental concepts and techniques of data mining. Concepts will be illustrated with case studies of real data mining examples. The focus is to find knowledge from huge amounts of data being handled electronically. Students will gain hands on experience using data mining tools on real data. Necessary background concepts in statistics and programming will be provided.

### MMIS 692 Capstone Project in Business Intelligence

Prerequisites: MMIS 630, MMIS 642, and MMIS 643

This capstone project requires students to employ the knowledge and skills assimilated in the four courses to design and develop a business intelligence application that leads to direct and measurable value for the student's organization.

## Notice of Nondiscrimination and Accreditation

Nova Southeastern University admits students of any race, color, sex, age, nondisqualifying disability, religion or creed, sexual orientation, or national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school, and does not discriminate in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school administered programs.

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

## For further information

- Visit us online at [www.cec.nova.edu](http://www.cec.nova.edu)
- Contact us at (954) 262-2005, toll free: 800-986-2247, ext. 22005 or via email at [cecinfo@nova.edu](mailto:cecinfo@nova.edu)
- Visit us on-campus at 3301 College Avenue, Carl DeSantis Building, Fourth Floor, Fort Lauderdale, Florida 33314
- Apply Online at [www.cec.nova.edu/admissions](http://www.cec.nova.edu/admissions)