# **Information Sciences**

#### Gulhan Bizel, Ph.D., Interim Director, Master of Science in Information Sciences

A Masters Degree in Information Sciences, 30-credit STEM degree program will serve to prepare diverse leaders in addressing complex issues and will follow a "learn-by-doing" pedagogy. In addition, the program will offer students the opportunity to apply skills and knowledge in real time every week through interactive, mentor-led practice sessions, as well as quizzes, assignments, and hands-on projects. As students' progress through the program, they will come to deeply appreciate the nuances of data as well as build a professional portfolio.

The program will be providing concentrations according to the selected electives:

- Master of Science in Information Sciences, Concentration: Data Science.
- Master of Science in Information Sciences, Concentration: Cyber Security.
- Master of Science in Information Sciences, Concentration: Artificial Intelligence (AI).

## **Program Availability**

The courses are offered on a trimester calendar (Fall/Winter/Spring/Summer terms) at the Jersey City Campus. Both online and hybrid delivery methods available.

# **Degree Requirements**

The degree requires 30 semester hours.

#### Advisement

The Program Director will advise students by using the Student Planning tool.

## **Time Limitation**

Students are expected to enroll continuously until their programs are completed. Students are required to maintain satisfactory academic progress by maintaining the required grade point average and accumulating sufficient credits within the stipulated time frame of five years.

# **Curriculum - Master of Science in Information Sciences**

Technology courses: 24 credits

- i. DS 530 Data Management -3credits
- ii. IS 600 Data Warehousing Lab -3 credits
- iii. DS 660 Business Analytics: Data, Models & Decisions -3 credits
- iv. IS 601 Process Management and Integration -3 credits
- v. IS 602 Integrating Information System Technologies -3 credits
- vi. IS 603 Information Technology Strategy -3 credits
- vii. IS 604 Data Integration for Business Intelligence and Analytics -3 credits
- viii. DS670 Capstone project -3 credits

Select 2 Elective Courses for concentration : 6 credits

- i. DS 630 Data Analytics and Machine Learning -3 credits
- ii. DS 683 Data Structures & Algorithms -3 credits
- iii. DS 684 Cloud Computing -3 credits
- iv. CY 510 Cyber Security & Risk Management -3 credits
- v. CY 540 International Communications and Networking. 3 credits.
- vi. CY 640 Cyber Crime Investigation & Digital Forensics -3 credits
- vii. DS 687 Artificial Intelligence Fundamentals credits
- viii. DS 688 Natural Language Processing 3 credits
- ix. DS 689 Mastering Conversational AI 3 credits

Industry Experience (if CPT DS-598, if not DS-597 requirement to complete the program)

DS-597 Applied Research Experience 0

DS-598 Applied Industry Experience 0

Total Credits 30