



Master of Science

# Master of Science in Quality Systems and Improvement Management (MSQSIM)

• CIP 520201 • 30 credits

## Program Description

The MSQSIM teaches theory that is germane to the discipline while also emphasizing the direct application of what students learn. The MSQSIM program emphasizes performance-based education where students acquire the critical knowledge and skills to analyze business practices; create comprehensive plans focused on tangible return on investment, and measure the effectiveness and efficiency of these plans. Since the vast majority of MSQSIM students are working in their field, they are then able to apply what they learn to their workplaces, both immediately and over the lifespan of their careers in ways highly akin to other CCG academic programs.

The skills taught in the MSQSIM program can be applied to improve the efficiency and effectiveness of the operation in a range of organizations and industries, including but not limited to healthcare, finance, manufacturing, military, and government. The MSQSIM provides strong, metrics- and outcomes-based education for advancing professionals that resonates well with careers in government and the military as well as a wide range of business fields.

Students will have the opportunity to choose one of two options in their final Capstone course. The first option is for students to choose a real-world Lean Six Sigma project with approval from their workplace. A second option is for students to choose an exam preparation track for those that wish to achieve certification for a Six Sigma Black Belt (CSSBB) or a Lean Six Sigma Black Belt certification (CLSSBB). The project and exam tracks are based on the American Society of Quality's (ASQ) Six Sigma Body of Knowledge.

## Program Outcomes

After completing this program, the student will be able to:

- Analyze customers' wants and needs within the identified environment and translate those into the customer's requirements.
- Design and implement a data collection plan.
- Analyze the performance of specific processes to include: creating appropriate metrics and collecting data.
- Select and apply the appropriate quality and project management tools and concepts in managing process improvement.
- Analyze the performance of a specific process in order to meet customer and business requirements.
- Identify, evaluate and implement solutions for process improvement.
- Analyze how the internal and external environment impact process improvement.
- Assess how organizational systems impact process improvement.
- Determine practices conducive to sustaining continuous process improvement.
- Identify new opportunities to leverage new systems and technologies.

**Program chair:** Jay Beirne, MSQSM

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## Instructional Delivery

The MSQSIM program is an online program. Courses are five weeks in length and there are eight sessions each year. The program is designed for students to take one course per five-week session, which is equivalent to three courses in a traditional 15-week semester. The program can be completed in 16 months of continuous enrollment.

## Core Curriculum ..... 21 credits

- MBA 501W Strategic Leadership & Management
- MBA 535W Operations Management & Supply Chain Management
- MBA 530W Legal & Ethical Dimensions of Strategic Management
- PJM 505W Project Management I
- QSM 525W Quality Systems & Strategic Planning
- QSM 545W Supply Chain Management
- QSM 565W Performance Based Management & Benchmarking

## Elective Courses ..... 6 credits

*Choose two:*

- MBA 505W Managerial Accounting
- MBA 515W Technology & Analytics for Managers:  
A Strategic Approach
- MBE515W Enterprise Risk Management
- PJM 510W Advanced Project Management
- QSM 543W Business Process Analysis
- QSM 572W Financial Systems & Lean Accounting

## MSQSIM Capstone ..... 3 credits

- QSM 600W Business Project Capstone  
(this course is ten weeks in length)

(All courses @ 3 credits except as noted.)