

Degree Description

Under the supervision of a Six Sigma Black Belt, McLennan's Six Sigma Certificate prepares students in analyzing and solving organizational quality issues. Students will learn to use Six Sigma tools and processes by performing quality-related exercises culminating with a quality improvement project internship. All courses taught in the Six Sigma Certificate meet the Six Sigma Green Belt body of knowledge identified by the American Society for Quality.

Marketable Skills

1. Operations management skills:

Learn to apply operations planning, manufacturing resource planning, lean manufacturing, and supply chain concepts within the global business environment. 2. Six Sigma skills: Learn to use quantitative and qualitative methods to build, sustain, and improve processes to achieve organizational excellence. 3. Leadership skills: Learn to lead others through the application of positive attitudes, goal-setting, motivational strategy, and humility. 4. Teambuilding skills: Learn to create, participate in, manage, and find success using functional and cross-functional work teams. 5. Computer skills:

Learn to use word processing, spreadsheet, data analysis, presentation, and database computer software to conduct business operations. 6. Communication skills:

Learn the ability to effectively develop, interpret, and express ideas through written, oral, and visual communication approaches. 7. Critical thinking skills:

Learn to analyze operations of a business, diagnose, propose, and implement solutions to business problems through research, synthesis, and application of information. 8. Ethics skills:

Learn ways to evaluate situations and make ethical decisions that are socially responsible.

Semester I	Hours
BMGT 1327 Principles of Management	3 hours
BMGT 2309 Leadership	3 hours
MATH 1342 Elementary Statistical Methods	3 hours
BMGT 1331 Production and Operations Management	3 hours
	12 hours

Semester II	Hours
ENGL 2311 Technical & Business Writing <i>or</i> POFT 1301 Business English <i>or</i> ENGL 1301 Composition I	3 hours
QCTC 1301 Total Quality Management	3 hours
QCTC 1391 ST:Quality Control Tech: Lean Six Sigma	3 hours
QCTC 1343 Quality Assurance	3 hours
	12 hours

Summer Semester	Hours
BCIS 1305 Business Computer Applications	3 hours
BMGT 1344 Negotiations and Conflict Management	3 hours
BMGT 1307 Team Building	3 hours
	9 hours

Total hours: 33 hours

⁰ Students who complete the CPT-4 certification through MCC's Corporate Education are awarded credit for QCTC 1301.

Course Descriptions

BMGT 1327 Principles of Management

Examines concepts, terminology, principles, theories, and issues in the field of management. Semester Hours 3 (3 lec)

BMGT 2309 Leadership

Introduces concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles. This is a Capstone course that integrates knowledge from previous courses and provides the opportunity to apply management and leadership principles to real world situations. Semester Hours 3 (3 lec)

MATH 1342 Elementary Statistical Methods

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Provides a study of statistical description of frequency distributions; sampling; elementary principles of probability distributions, both binomial and normal; estimation of parameters; tests of hypotheses; linear regression and correlation; independence of variables by Chi Square analysis; and an introduction to a statistics software package. Use of appropriate technology is recommended. Graphing calculator required. Prerequisite: TSI math complete (non- algebraic) or MATH 0308 or completion of college-level math course. Semester Hours 3 (3 lec)

BMGT 1331 Production and Operations Management

Introduces the fundamentals of techniques used in the practice of production and operations management. Includes location, design, and resource allocation. Semester Hours 3 (3 lec)

ENGL 2311 Technical & Business Writing

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice of individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

POFT 1301 Business English

Introduces the practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. Semester Hours 3 (3 lec)

ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis is on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus is on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Note: ENGL 1301 is a pre-requisite for all 2000-level literature courses. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

QCTC 1301 Total Quality Management

Introduces the study of integrating work processes using team participation through employee empowerment and teamwork emphasizing the philosophy of customer service and satisfaction. Semester Hours 3 (3 lec)

QCTC 1391 ST:Quality Control Tech: Lean Six Sigma

Presents topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Semester Hours 3 (3 lec)

QCTC 1343 Quality Assurance

Examines principles and applications designed to introduce quality assurance. Semester Hours 3 (2 lec/2 lab)

BCIS 1305 Business Computer Applications

Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the internet. Semester Hours 3 (2 lec/2 lab)

BMGT 1344 Negotiations and Conflict Management

Discusses theories that aid in the diagnosis of interpersonal and intergroup conflict. The role of manager as negotiator, intermediary, and problem-solver. Semester Hours 3 (3 lec)

BMGT 1307 Team Building

Introduces principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team. Semester Hours 3 (3 lec)
