

Supply Chain & Operations Management McLENNAN COMMUNITY COLLEGE

2023-2024

Degree Description

The Supply Chain & Operations Management program prepares graduates to perform in a supervisory role in manufacturing or service industries.

Graduates of this two-year program earn an Associate of Applied Science degree.

The curriculum focuses on improving quality in organizations of all types by using the Lean Manufacturing and Six Sigma approaches.

This includes measuring improvements using higher-level mathematics and statistics.

Courses within the program address a number of core competencies including production, quality assurance, inventory management, supply chain and logistics, safety, purchasing, and scheduling.

The program culminates with a Six Sigma internship reviewed by a certified Six Sigma Black Belt.

This allows students to receive hands-on, real-world experience while contributing knowledge gained from their academic pursuits directly back to their employer.

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. Logistics and purchasing skills: Learn to apply logistics and purchasing concepts to improve supply chain operations, reduce costs, and ensure continuity of operations.
- 3. Six Sigma skills: Learn to use quantitative and qualitative methods to build, sustain, and improve processes to achieve organizational excellence.
- 4. Safety skills: Learn to apply industrial best practices and OSHA standards to mitigate hazards in the workplace through safety program management.
- 5. Leadership skills: Learn to lead others through the application of positive attitudes, goal-setting, motivational strategy, and humility.
- 6. Teambuilding skills: Learn to create, participate in, manage, and find success using functional and cross-functional work teams.
- 7. Computer skills: Learn to use word processing, spreadsheet, data analysis, presentation, and database computer software to conduct business operations.
- 8. Communication skills: Learn the ability to effectively develop, interpret, and express ideas through written, oral, and visual communication approaches.
- 9. 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.
- 10. Ethics skills: Learn ways to evaluate situations and make ethical decisions that are socially responsible.

Semester I	Hours
BMGT 2309 Leadership	3 hours
BMGT 1327 Principles of Management	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	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 Seme	ster	Hours
BCIS 1305 Business Computer Applications		3 hours
BMGT 1344 Negotiations and Conflict Management		3 hours
SPCH 1315 Public Speaking or SPCH 1318 Interpersonal Communication or SPCH 1321 Business & Professional Communication		3 hours
ECON 2301 Principles of Macroeconomics or ECON 2302 Principles of Microeconomics		3 hours
		12 hours

Semester III	Hours
BMGT 1313 Principles of Purchasing	3 hours
LMGT 1319 Introduction to Business Logistics	3 hours
IBUS 1341 Global Supply Chain Management	3 hours
LMGT 2388 Internship - Logistics & Material Management 1,2	3 hours
	12 hours

Semester IV	Hours
HRPO 2301 Human Resources Management	3 hours
BMGT 1307 Team Building	3 hours
OSHT 2309 Safety Program Management	3 hours
BMGT 2310 Financial Management	3 hours
	12 hours

Must meet guidelines for Internships as outlined in the General Catalog.

LMGT 2388, Internship is a CAPSTONE course that brings together skills and knowledge learned in other classes and applies them in decision making situations and completing job tasks. Check for prerequisites.

Course Descriptions

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)

BMGT 1327 Principles of Management

Examines concepts, terminology, principles, theories, and issues in the field of management. 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. Use of appropriate technology is recommended. Graphing calculator required. Prerequisite: TSI math complete 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)

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. (BCIS 1305 is included in the Business Field of Study.) 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)

SPCH 1315 Public Speaking

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Semester Hours 3 (3 lec)

SPCH 1318 Interpersonal Communication

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts, including friendships, romantic partners, families, and relationships with co-workers and supervisors. Semester Hours 3 (3 lec)

SPCH 1321 Business & Professional Communication

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Semester Hours 3 (3 lec)

ECON 2301 Principles of Macroeconomics

Analyzes the economy as a whole including measurement and determination of aggregate demand and aggregate supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, fiscal policy and monetary policy. Prerequisite: Must have passed the TSI Assessment or be concurrently enrolled in INRW 0402. Semester Hours 3 (3 lec)

ECON 2302 Principles of Microeconomics

Analyzes the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Must have passed the TSI Assessment or be concurrently enrolled in INRW 0402. Semester Hours 3 (3 lec)

BMGT 1313 Principles of Purchasing

Introduces the purchasing process as it relates to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing. Semester Hours 3 (3 lec)

LMGT 1319 Introduction to Business Logistics

Introduces a systems approach to managing activities associated with traffic, transportation, inventory management and control, warehousing, packaging, order processing, and materials handling. Prerequisite: BMGT 1331. Semester Hours 3 (3 lec)

IBUS 1341 Global Supply Chain Management

International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics.

LMGT 2388 Internship - Logistics & Material Management

Establishes a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer Prerequisites: BMGT 1313 and BMGT 1331. Semester Hours 3 (1 lec/15 lab)

HRPO 2301 Human Resources Management

Introduces behavioral and legal approaches to the management of human resources in organizations. Recommended completion of BMGT 1303 or BMGT 1327. Semester Hours 3 (3 lec)

BMGT 1307 Team Building

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

OSHT 2309 Safety Program Management

Examines the major safety management issues that affect the workplace, including safety awareness, loss control, regulatory issues, and human behavior modification. Semester Hours 3 (3 lec)

BMGT 2310 Financial Management

Presents examination of accounting information to support managerial decision-making processes. Topics include managerial concepts and systems, various analyses for decision making, and planning and control. Semester Hours 3 (3 lec)