



EXPERIENCED PROFESSIONAL CERTIFICATE IN **Operations Management**

Certificate Description

This certificate provides professionals the opportunity to enhance understanding of operations management principles in today's business environment.

Materials Planning—MGMT 333—This course takes an in-depth look at the planning and control of material flow and production activities in a manufacturing organization. Topics Include: forecasting, sales and operations planning, demand management, master production scheduling, material requirements planning, production execution, and just-in-time systems.

Outcomes:

- Discuss the concepts of demand management
- Demonstrate a knowledge of material requirements planning
- Evaluate the best practices of measuring business performance
- Apply critical thinking in applying master planning concepts
- Recognize techniques and practices of inventory management
- Use effective communication techniques

Training and Development—MGMT 438—This course examines the various training and human resource development techniques utilized by corporations to improve employee and organizational effectiveness. The focus will be on needs assessment and analysis, training design and implementation, evaluation techniques, and management succession planning.

Outcomes:

- Evaluate the role and function of the HRD specialist
- Critique the various assessment tools
- Assess and apply the various models utilized for training and development
- Analyze the strengths and weaknesses of specific training strategies
- Evaluate the various methods of assessing the effectiveness of training and development programs
- Argue the implications of culture in training and development
- Appraise major challenges of implementing training and development programs.
- Critique the impact of technology on business and using effective communication techniques.
- Evaluate situations that present potential ethical and legal issues and develop solutions for those issues.



EXPERIENCED PROFESSIONAL CERTIFICATE IN **Operations Management**

Cost Control Management—MGMT 370—This course deals with the control of the various costs associated with running a business. The course is broken down into three phases: comparing a company's costs to the industry average, finding out why a company's costs are higher than the industry average and implementing approaches to reduce a company's costs. Specific topics include: Materials Management Challenges, Benchmarking, Inventory Control and Management, Production Processes, Lean Manufacturing and Waste in Manufacturing.

Outcomes:

- Understand the importance of cost control management and measurement.
- Construct control charts to monitor processes
- Compare and contrast Cost Control Management and supply chain management
- Understand inventory management concepts and determine inventory quantities and ordering policies
- Develop aggregate capacity requirements for production planning.
- Describe applications of information technology: MRP & ERP systems and discuss lean operations and push vs. pull systems
- Utilize methods for operations scheduling and project cost control management.

Operations Management—MGMT 411—This course explores the basic principles of operations management in modern organizations which involves design, management and improvement of productive processes. Subjects include evaluation of the transformation processes involved in the creation of goods and services in today's modern business.

Outcomes:

- Assess the importance of quality management and measurement.
- Construct control charts to monitor processes.
- Critically compare and contrast operations management and supply chain management.
- Evaluate inventory management concepts and determine inventory quantities and ordering policies.
- Develop aggregate capacity requirements for production planning.
- Critique applications of information technology: MRP & ERP systems.
- Appraise lean operations and push vs. pull systems
- Utilize methods for operations scheduling and project management



EXPERIENCED PROFESSIONAL CERTIFICATE IN **Operations Management**

Production Planning and Quality Management—MGMT 430—This course focuses on Production planning and Quality in decision making. Emphasis is laid on forecasting aggregate production planning, capacity planning, materials requirement planning, scheduling, advanced techniques and approaches in modern production planning and control for designing manufacturing, quality and service systems.

Outcomes:

- Understand the importance of quality management and measurement.
- Construct control statistical charts to monitor quality processes
- Compare and contrast service and product quality
- Understand capacity planning management concepts and develop aggregate capacity requirements for production planning.
- Understand the cost of quality and cost of failure
- Utilize methods for operations scheduling and project management
- Utilize qualitative and quantitative forecasting to determine capacity planning.

Supply Chain Management and Purchasing—MGMT 450—This course explores the basic principles of supply chain management in modern organizations. The subjects include key areas of supply chain management such as supply chain economics, supply chain strategies, e-procurement, logistics management, global supply chain issues, vendor selection, and measurement of supply chain performance.

Outcomes:

- Critically appraise the key concepts of Supply Chain Management (SCM)
- Evaluate distribution Network Design in a Supply Chain
- Assess aggregate Planning and Product Variety Management
- Critique inventory Management: Deterministic & Stochastic; Multi-Period & Multi-Echelon
- Assess strategic Alliances and Outsourcing Strategies
- Evaluate Supply Chain Coordination and Contracts, Customer Value and Supply Chain Management

Plant Management—MGMT 460—Plant managers are responsible for ensuring that plant operations meet organizational goals in a safe and efficient manner. This course looks at several of the key responsibilities of plant managers including: Coordination of Plant Operations, Plant Maintenance, Establishment of Plant Policies and Procedures, Establishment of Productivity Goals, and Product Quality Control.

Outcomes:

- Identify the critical areas of plant management
- Evaluate quality control tools and methodologies
- Demonstrate a knowledge of master production scheduling and material requirements planning
- Create a policy and procedure manual
- Apply critical thinking to plant operational issues
- Use effective communication techniques



EXPERIENCED PROFESSIONAL CERTIFICATE IN **Operations Management**

Strategic Manufacturing Policy—MGMT 465—This course explores the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related functions. The course addresses three main topics: aligning resources with the strategic plan, configuring and integrating operating processes to support the strategic plan, and implementing change.

Outcomes:

- Understand the importance of strategic capacity planning
- Construct a House of Quality using Quality Function Deployment
- Compare and contrast Service & Product Design
- Understand Supply Chain management concepts and determine inventory quantities and ordering policies
- Develop aggregate capacity requirements for production planning.
- Describe applications of Business Strategy of Design
- Utilize methods for operations scheduling and project management