

## **Course Description**

## MAN3504 | Production Operations and Logistics Management | 3.00 credits

This course examines the integration of production operations and logistics management and how they enable an organization to compete successfully in business. Students will learn the relationships that exist between operations and the supply chain, including operations and supply chain strategies, business processes, project management, product design and development, and inventory management. This course uses case study methodology. Prerequisites: MAN2021 and TRA1154.

## **Course Competencies:**

**Competency 1:** The student will make decisions regarding the production of appropriate goods in the right quantity and quality and distributed to the right place at the right time by:

- 1. Developing quantitative methods to make procurement decisions
- 2. Examining quality measurement and assurance procedures
- 3. Facilitating performance analysis
- 4. Evaluating scheduling and control procedures throughout the supply chain

**Competency 2:** The student will demonstrate an understanding of materials handling and inventory management by:

- 1. Examining a modern inventory management system
- 2. Developing quantitative data in making "make/buy" decisions
- 3. Developing a cost-benefit analysis to make decisions regarding packaging, materials, and inventory management
- 4. Analyzing the functions of warehouses and their function in the supply chain

**Competency 3:** The student will manage the whole supply chain from the acquisition of raw materials through production to the point of consumption by:

- 1. Developing quantitative models, computers, and communication skills to make and implement intelligent decisions
- 2. Creating a competitive advantage through efficient use of procurement, production, distribution, disposal, and reverse logistics
- 3. Assessing suitable suppliers and determining how many there should be
- 4. Evaluating performance in terms of quality, cost, and time, and how to improve by redesigning business processes

**Competency 4:** The student will demonstrate an understanding of production by:

- 1. Generating and assessing production planning
- 2. Developing best practices for production operations
- 3. Examining the impact of new production technology on profitability
- 4. Generating new product development based on research and modeling techniques

## **Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information