



Course Description

MAN4552 | Supply Chain Analytics & Decision Making | 3.00 credits

Through this course students will focus on the science of learning from data to support decision making. The objective of this course is to explore and apply basic statistical concepts and procedures that are used to collect, analyze, summarize, and report data in a supply chain management role. Course topics covered include methods for: collecting, analyzing, summarizing data; making statistical inferences about populations and exploring the relationship between variables. The course introduces analytical tools and techniques that provide a cause and effect understanding linking operational plans with corporate objectives.

Course Competencies:

Competency 1: The student will describe how Supply Chain Analytics & Decision Making can strategically create a competitive advantage within an industry by:

1. Analyzing how supply chain management components contribute to the success of an organization's strategic goals
2. Evaluating how the supply chain analytics function in production settings
3. Strategizing decision-making techniques to address supply chain issues
4. Appraising and applying strategic methods as the basis of the supply chain systems
5. Recognizing the process supply chain management components in any system
6. Acknowledging the importance of an efficient production strategy with a supply chain
7. Understanding the variables that affect the quality and design of products and services

Competency 2: The student will explain the strategic importance of analytical decision-making in supply chain management by:

1. Assessing various problem-solving approaches to process improvement in production settings
2. Applying the knowledge and communication skills necessary for a supply chain management environment
3. Solving supply chain decision-making problems using analytical and critical problem-solving tools

Competency 3: The student will demonstrate the use of supply chain-related analytical techniques to aid in management decision-making by:

1. Discussing supply chain decisions and how they relate to the overall strategies of organizations
2. Analyzing how product and design designs impact the components within a supply chain
3. Gaining an understanding of quality management practices and six-sigma facilitation
4. Understanding the relationship between aggregate and project planning
5. Recognizing basic inventory management strategies
6. Constructing various supply-chain management scenarios with matching organizational strategies

Competency 4: The student will apply supply chain analytics strategies to increase competitive advantage by:

1. Understanding how supply chain analytics strategies create and enhance a company's competitive advantages
2. Understanding the vitality of productivity and competitiveness within a supply chain
3. Constructing various production and supply chain design strategies

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
- Demonstrate knowledge of diverse cultures, including global and historical perspectives