OTM-802 Inventory and Warehousing Management

Inventory and Warehousing management examines logistics systems that support the physical supply of raw and semi-finished materials to a firm, the planning and control of Inventory and Warehousing, and the delivery of the products or services up to the final customers, with the objective of achieving a sustainable competitive advantage and optimizing the value and the long-term performance of the firm and the supply chain as a whole. Although not all organizations are in the manufacturing sector, almost all buyers will at some point purchase from manufacturers and so understanding inventory management from a manufacturing perspective is important. Once stock is purchased, it must be stored and managed utilizing a number of principles to ensure stocks are received, stored, issued and accounted for throughout the Inventory Life Cycle.

Content

The course examines logistics systems that support the physical supply of raw and semi-finished materials to a firm, the planning and control of Inventory and Warehousing, and the delivery of the products or services up to the final customers, with the objective of achieving a sustainable competitive advantage and optimizing the value and the long-term performance of the firm and the supply chain as a whole.

Objectives

- Improved critical thinking, conceptual and analytical skills.
- Improved teamwork skills and ability plan and execute projects.
- Knowledge of the scholarly and practitioner works in the inventory management field.
- A better understanding of the prevailing technical and managerial issues impacting the field.
- A good grasp of the role and impact of technology and its applications in the warehousing.
- The necessary abilities to design, operate and improve inventory and warehousing systems.

Outcomes

- Understand the financial impacts of inventory and the risks in both over and under holding of inventory.
- Demonstrate the importance of inventory management in business and evaluate the optimum inventory level in both certain and uncertain conditions
- Know how dependent inventory demand calculations are undertaken in Material Requirement Planning systems and Enterprise Resource Planning systems.
- Understand the importance of effective Warehouse Management in minimizing the cost associated with the storing, moving and transporting goods into and out of the warehouse storage locations;
- Categorize cargo storage and materials handling systems which provide a good academic and professional foundation for a career in related fields.
- Identify inventory and warehousing issues in an integrated logistics flow which reflects sound business practices.

Text and reference books

- Production and Operational Analysis, 6th Edition by Steven Nahmias, McGraw-Hill.
- Factory Physics, 3rd Edition, Wallace J. Hopp and Mark L Spearman, Waveland Press Inc.
- Supply Chain Management: Strategy, Planning, and Operations, 4th Edition by S. Chopra and P. Meindl, Pearson Education Prentice Hall.
- Warehouse & Distribution Science, Release 0.98 (www.warehouse-science.com) by J.J Bartholdi & T. Hackman, The Supply Chain & Logistics Institute, Georgia Institute of Technology USA.