

IMT - INDUSTRIAL AND MANUFACTURING TECHNOLOGY

IMT 100 Participate in Supply Chain Operations (1-3-4)

This unit aims to prepare learners with an insight into the concept of supply chain operations; It also introduces the essential knowledge and skills which are significant in every part of the Logistics environment. This unit will prepare learners for work in the logistics environment by developing knowledge, skill and practical experience to meet the demands of organisations in the UAE.

IMT 200 Apply Quality Control Tools and Techniques for Process Improvement (2-1-3)

This module aims to equip learners with the necessary knowledge and skills to demonstrate, implement, and administer a quality management system. This is facilitated by utilizing concepts of statistical thinking and process performance. The learners will be able to design and interpret statistical process control charts. Additionally, learners will gain an understanding of various acceptance sampling techniques used in both manufacturing and service organizations.

IMT 201 Discover Manufacturing Technology (2-2-4)

This unit aims to give students a grounding in the processes and technologies relative to manufacturing technology. The course includes primary and secondary manufacturing processes, process selection, measurement systems, quality control of manufactured parts, and technologies associated with Advanced Manufacturing Technology (AMT)

IMT 202 Apply Principles of Engineering Economics (3-0-3)

This module aims to provide learners with the knowledge and skills required to proficiently apply principles of engineering economics and informed financial decision making in the organizational context. By the end of this course, students will be able to comprehend the foundational concepts of engineering economics, explore the financial aspects of industrial projects, describe cost structures, assess risk and uncertainty, and make informed decisions that contribute to the economic viability of the organization.

IMT 203 Implement Lean Production System (2-2-4)

This unit aims to provide learners with the knowledge and skills required to effectively implement Lean manufacturing principles, emphasizing waste reduction, continuous improvement, and customer-centricity in real-world industrial and manufacturing contexts. It fosters problem-solving abilities, process optimization, and quality enhancement while promoting collaboration and bridging theory and practice through hands-on factory training.

IMT 204 Explore Facilities Layout and Material Handling System (1-2-3)

This unit aims to provide learners with the knowledge and skills required to introduce fundamental concepts of industrial engineering areas such as facility planning and material handling systems. Topics such as flow analysis, facility location and layout, material handling systems are covered.

IMT 205 Manage Engineering Projects (2-1-3)

This module aims to provide learners with the knowledge and skills required to engineer projects from conception to completion while considering ethics and sustainability. Emphasis will be on project scheduling, budgeting, risk assessment, stakeholder communication, and the practical application of project management tools. Students will gain hands-on experience by developing, executing, and closing real or simulated engineering projects, ensuring decisions made align with ethical standards and sustainable practices.

IMT 206 Apply Production Planning and Control Principles and Techniques (3-1-4)

This unit aims to equip learners with the skills and knowledge required to understand and apply production planning and control principles and techniques to verify stocks and compute quantities required by production programs, and assist in the preparation of production operation schedules on the basis of customers' orders and production capacity and performance.

IMT 230 Perform Practical Training and Support in Manufacturing Industries (0-4-4)

The aim of this unit is to allow student to participate in an apprenticeship program that allows student to gain an on job training. It provides learners with the practical knowledge and skills to develop students' ability to show understanding and knowledge to solve problems in the real world situation. It aims to assess trainee's competence in completing safe and effective on-site hands-on training in disciplines related to Manufacturing Engineering.