Semester 1

MPI 111: Advanced Manufacturing Techniques

This course is primarily designed for the post graduate students to make them understand engineering design production supervision and management utilized to remain competitive in today s technologically advanced manufacturing facilities. It also includes the study of lean manufacturing techniques used to reduce costs and increase plant efficiency and productivity.

MPI 112: Industrial Robotics

This course comprises of knowledge and skills from various engineering fields which include electronics electrical mechanical computer software and communication engineering. This course will also provide in depth knowledge for students in the areas of industrial automation robotics and PLCs.

MPI 113: Numerical Methods with MATLAB

This course introduces students to MATLAB programming and demonstrate it s use for scientific computations. The basis of computational techniques are expounded through various coding examples and problems and practical ways to use MATLAB.

MPI 114: Advanced Materials Engineering

The course introduces students to with the knowledge of materials (Polymeric Metallic Ceramic and Composite) allowing them to develop the skills further in more application and research based areas of materials engineering such as smart materials and materials in energy based applications. The student will gain skills in characterization of different advanced materials with their structural thermal morphological and chemical properties.

MPI 115: Production & Inventory Decisions

This course is mainly for the study of relevant topics recognized as important factors for successful management of business operations. Topics include: processes and their measurement in manufacturing and services forecasting aggregate planning inventory management quality control and supply chain management.

MPI 116: Technical Presentation-I

In this course students will develop the basic strategies they need for preparing and giving an effective presentation in science and engineering. This course will also help students in effective technical report writing giving them the skills and confidence to generate compact and well-thought out documents and to present their reports to an audience with convincing and memorable impact

MPI 117: Simulation Lab-I

The aim of this laboratory is to provide required simulations facilities to the post graduate students in order to meet their requirements of Mechanical engineering profession. The main emphasis is to do the project work on designing different mechanical components and doing the analysis using Solid works.