Semester 2

MPI 121: Instrumentation and Control

This course is designed to give the students' knowledge about function operation and application of common mechanical engineering instruments measurement principles and statistical analysis. Major elements of measurement systems including transduction signal conditioning and data recording. Function and operation of digital data acquisition systems.

MPI 122: Computer Integrated Manufacturing Systems

The course explores manufacturing history individual processes systems and careers. In addition to technical concepts the course incorporates finance ethics and engineering design which reflects an integrated approach that leading manufacturers have adopted to improve safety quality and efficiency.

MPI 123: Smart Manufacturing

This course is designed to introduce and explain the concepts and technology of a modern product manufacturing environment and to show how design and manufacturing are integrated within it to demonstrate the benefits and applications of computer technology in modern product & process manufacturing and design industries and to understand the commercial demands on modern manufacturing and outline how production management processes and theories have evolved to meet them.

MPI 124: Supply Chain Management

This course prepares students in the basics of supply chain and supply chain s roles within organizations. The course includes defining supply chain management and the various domains within supply chain (i.e. customer service manufacturing and service operations order management procurement and supply management demand planning inventory management warehousing operations and transportation operations).

MPI 125: Renewable Energy and Energy Management

This course is designed to enable students with different backgrounds to understand the different aspects of energy engineering. Students will be exposed to the status of energy resources its interaction with environment different renewable energy sources technologies different techniques and technologies for

energy management and energy conservation along with the economic aspects of renewable energy based power generation.

MPI 126: Technical Presentation-2

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 127: Simulation Lab- II

This practical course is the extended course of Simulation â€“ I designed to enhance the knowledge of designing and to impart the knowledge of analysis mechanical components using various analytical tools like ANSYS FLUENT etc. for Engineering Simulation. The students will be solving some real time problems related to Mechanical industry by using these tools.