Module Synopsis – Postgraduate Diploma in Engineering Management

Operations Management

Familiarises students with the nature and processes of operations management and decision-making techniques that are used to overcome or minimise some common operating problems within organisations. This includes location, production design and specification, quality standards and control and productivity measurement. In this subject, a balance of service and manufacturing applications is maintained.

Assessment weighting: 100% coursework

Accounting and Finance for Decision Making

To provide students with sound technical knowledge for understanding and preparing financial accounts. Foundation knowledge and understanding of the fundamental principles of accounting and finance will be taught. Students will also be introduced to simple financial budgeting/planning, cost allocation, time value of money, cash flow projection and other relevant concepts.

Assessment: Coursework 50%; Examination: 50%

Technopreneurship

This module aims to provide students with a platform to develop and exercise their innovation and creativity in a practice-based environment. Students will learn to identify, assess and develop new or improve on existing business ideas, as well as to plan for these business ventures and enterprises effectively. At the end of the module, students will be able to develop a business plan encompassing market research and analysis, as well as marketing, and operations strategies.

Assessment: Coursework 100%

Project Management

Students will understand the theories and processes of project management, the role the project manager, project team and champions play, and the range, scope and complexity of modern projects.

Assessment weighting: Coursework 100%

International Business Management

This module is designed to enable students to demonstrate an understanding of the concept of international business management in a global marketplace and the major sectors of the international business environment, as well as international management challenges, opportunities and barriers. Students will develop and understanding of the social, cultural, economic and political frameworks that impact on business management in Asia/Pacific Rim countries, as well as an understanding of current issues, their timing and the causal affects they have on industry. Students will gain the skills to identify effects of globalisation on industry, and international management challenges, opportunities and barriers, as well as strategies to manage them. Students will also gain an understanding of the impact of political environments and international policies and agreements in international business.

Assessment: Coursework 100%

Strategic Human Resource Management

To develop a knowledge of the theories, concepts and strategies of HR Management. Students will understand the role of the human resource manager, the application of human resource management for specific organisational scenarios, and the legislative requirements related to the field.

Assessment: Coursework 50%; Examination - 50%

Introduction to Research

This aim of this module is to provide students with the skills to apply the management research process, from identifying problem areas to understand the planning and design of managerial research. Emphasis will be given to research in engineering management.

Students will prepare to undertake an independent enquiry through individual self-directed project work. This module provides students with the skills and knowledge to design and plan a research project. Students will develop research objectives, formulate appropriate methodologies, and critique literature. Students will develop a research plan in order to explore their research ideas. They will also show an ability to communicate their ideas and plans in both oral and written forms.

Assessment: Coursework 100%

Applied Special Project

The aim of this module is to facilitate an independent enquiry in a small scale substantial piece of individual self-directed research work.

This module provides students with the opportunity to conduct a piece of research through individual and independent activity and to present their findings using visual aids and in written academic format that meets professional standards.

Students will develop research objectives, formulate appropriate methodologies, and apply problem solving and analytical skills in a business context of their choice.

Assessment: Coursework 100%