

UNIVERSITY OF MAURITIUS
FACULTY OF ENGINEERING



Department of Mechanical and Production Engineering

An overview of BSc (Hons) Production and Operations Management Degree Programme

Introduction

Global markets have unleashed a variety of challenges to the mankind. Facing stiff competition, the emerging players in China, India etc. survive by **'differentiating'** their products and services from that of their rivals. Taking advantage of the phenomenal growth in science and technology, business managers in manufacturing and service units train or recruit resourceful **'production and operations'** managers to get the highest value from their limited/scarce resources. The Japanese experiences and those of emerging nations bear testimony to this fact. It is therefore essential to have programmes that meet the up-to-date requirements and help pursue a management career in manufacturing as well as service industries.

Program entry requirements

General entry is as per University Undergraduate degree requirements. Two (2) GCE 'A' Level Passes including Mathematics are required (*See University Entry requirements also*).

Programme

The needs of all stake holders and the emerging trends, prompted the Department to have consultations with the local industries, academicians, and researchers world over. Based on analysis and critical evaluation, a balanced programme structure was developed. The programme was launched during the academic year 2005-2006. Please note that this is not a professional programme and this degree may not be adequate for registration with the Council of Registered Professional Engineers (CRPE). However the job opportunities for the successful students are numerous.

Programme structure

The programme, spread over three years, provides a broad base to understand the generic production and industrial engineering concepts. The programme is designed to provide overview of basics of production technology covering manufacturing and industrial automation to get a vivid picture of industrial as well as service scenarios. Maintenance of equipment is included to help realise the expected outputs from services (banks, ICT, health care) and manufacturing systems.

The necessary communication skills to deal with all levels of employees will be covered. Creation of goods and services through efficient and effective use of personnel, materials and machines will be emphasised. While the specific nature of processes differs among enterprises, the main principles and functions of Production and Operations management are the same. These include the acquisition of resources, planning production and inventory levels, scheduling work assignments, and controlling production and product quality. Recent advances in computer technology and information sciences have extended the practical application of quantitative techniques to all areas. These are lined up for the learner. The lectures, practical sessions, and other instructional methods integrate the latest technologies with creative thinking to provide the learner a basis for developing a sound administrative behaviour. The local as well as international project appraisal practices, occupational health and safety requirements, marketing and supply chain strategies, ethical and moral considerations will be provided to effectively shapeup the learner.

Why Choose the University of Mauritius?

Programme curriculum has a proper/unique blend of technical education and general business courses, operations skills, practical behavioural science and human relations applications.

In-depth study provided in this university into the operations management emphasizes skills required along with a goal oriented, continuous overview of improving service to customers.

Use of computer applications and the minor/major projects in the courses prepare the student to solve business and operations problems of a realistic nature in local context.

Practical experience of the faculty members/visiting facilitates exposure of the students to the pragmatic application of important concepts to real world applications.

Job Prospects

The knowledge acquired can be used as a base for further studies in the chosen area both locally and abroad. Manufacturing and service organisations in Governmental, parastatal, and private organisations offer adequate opportunities. Typical jobs are found in the areas of Operations Planning and Control, Purchasing, Material control, ISO9000, Logistics, Distribution, Productivity Improvement, Quality Assurance, Business Systems and Applications, Industrial Marketing, Production /Operations Supervision, Small Business Management etc.