

Master of Science (Project Management)

SYLLABUS (IMPLEMENTED IN AY2014/15)

Description of Modules

PM5101 Project Management

The module offers an overview of project management. It covers the strategic use of projects as part of business strategy, the project cycle in terms of its conception, planning, and execution, and the factors that underpin the success of projects. The project manager as an effective leader in managing projects is emphasized at each stage of the cycle.

PM5103 Contract Management

This module examines the management of contracts in a project. It covers contract strategy in terms of procurement and risk allocation, standard forms of contract, documentation, claims management, dispute management, and insolvency.

PM5112 Research Methods

This module examines research methodologies in terms of the general philosophies of science as well as detailed research methods. It covers the research process of problem formulation, hypothesis formulation, research design, data collection and analysis, developing the conclusion, and writing the research report.

PM5105 Development Finance

This module introduces capital budgeting, project finance, and risk analysis. It covers the capital allocation framework, project cash flows, investment criteria, cost of capital, financial risk analysis, and how various types of projects are financed.

PM5106 Design Management

This module is designed to provide project managers with an appreciation of the role of design as well as the designer in projects. It covers the concept of design for value, integrated designs, the client's brief, design evaluation, and the impact of design on procurement and production.

PM5107 Time and Cost Management

This module focuses on project scheduling and control. It covers tendering and estimating, activity sequencing, duration and time planning, scheduling and control, materials management, equipment ownership and management, labor costing, subcontracting, quality management, and financial control of projects (incorporating cash flow analysis and financial reporting).

PM5109 Project Management Law

This module provides an understanding of aspects of law and mechanisms for resolving disputes. It covers the law of contract, the duties and liabilities of different parties in a project, negligence, claims, procurement, risk allocation, and remedies.

PM5111 Special Topics in Project Management

This module is designed to allow students to conduct independent studies on special topics in project management under the guidance of a team of staff members. Students are required to submit a 6,000-word report.

PM5113 Managing Projects using BIM

This module is designed to provide project managers with an appreciation of the role of BIM as the project manager in projects. It covers the concept of BIM in design matters, contract and dispute management, and post contractual matters.

PM5114 Managing Complex Projects

This module focuses on the management of complex projects. It covers the design and planning for beyond the project itself, the work package structure of such projects and issues related to the sourcing of suitably experienced contractors, consultants, and other personnel, the impact of variations and consequential claims, and matters concerning termination, completion and handing over.

PM5115 Project Finance Contracts & Agreements

This module provides an understanding of aspects of different project finance contracts and agreements. It covers the issues of risk management through contractual terms, duties and liabilities of lenders and borrowers, dispute management and contractual remedies, and issues relating to international contracts.

PM5116 Project Finance Case Studies

This module provides an opportunity for students to study how project finance plays an important role in a major development project by a review of relevant case studies.

PM5000 Dissertation

This graded module provides students with the opportunity to conduct independent research under the guidance of a supervisor. Students are required to submit a 10,000-word written dissertation.