Project Management

GRADUATE CERTIFICATE IN PROJECT MANAGEMENT

Duration: 6 months - 2 years

Intake: January, April, July, October

Campus: The University of Adelaide Singapore Campus

Number of courses: 4

Application Fee: S$107 (incl. 7% GST) upon application submission.The application fee will be fully refunded if unsuccessful in meeting the entry requirements.

Fee Per Course: S$2,407.50 (incl. 7% GST)

Total Tuition Fee: S$9,630 (incl. 7% GST)

Prerequisites/Entry Criteria: Non-degree applicants with relevant work experience.

Extra Admission Requirements: For non-English speaking background applicants, minimum English language proficiency is required, as follows:

- IELTS of at least 6.0 with minimum of 6.0 in all bands; or
- Paper-based TOEFL of 550 with minimum of 4.0 in Test of Written English (TWE); or
- Computer-based TOEFL of 213 with minimum Essay rating of 4.0; or
- Internet-based TOEFL of 80 with minimum of 20 in all bands

Faculty: Engineering, Computer and Mathematical Sciences

School: Entrepreneurship, Commercialisation and Innovation Centre

Website: www.adelaide.edu.au/sg

Email: registrar@naaec.com.sg

Program Overview: Studies in project management focus on achieving goals. Graduates in project management are sought after by employers. The courses include a strong focus on processes and tools required to achieve outcomes and industry-specific case studies, class discussions and assignments based on real projects, including the participant's own workplace projects.

Project management programs guide you through the leading-edge project management concepts, with a strong emphasis on holistic and systems-based project management methods, combined with the practical application of concepts, techniques and tools. There is flexibility to select options from entrepreneurship and commercialisation. The Entrepreneurship, Commercialisation and Innovation Centre is a Registered Education Provider for PMI.

Assessments: Intensive lectures, standard coursework, project work and assignments.

Professional Accreditation: PMI (Project Management Institute) has accredited the University of Adelaide's MPM (Master of Project Management). The University of Adelaide is also a PMI Registered Education Provider (R.E.P.). An R.E.P. is an organization approved by PMI to issue Professional Development Units (PDU) for its training courses.

The University of Adelaide, Singapore Campus has been granted the accreditation from PEB Singapore (Professional Engineers Board) from July 2008 onwards. The PEB Singapore is a statutory board in the Ministry of National Development. For details, please visit www.peb.gov.sg

Likely Careers: The program provides the knowledge for graduates to develop their own companies based on their background in science and technology. It enables graduates to move from technical fields into management positions.

CORE COURSES

Applied Project Management 1

Managing Risk

Project & Innovation Finance & Accounting

ELECTIVE COURSES

Business & Contract Legal Studies

Complex Project Management 1

Project Management Techniques

Business & Project Creation

COURSE DESCRIPTION

Core Courses:

Managing Risk: This course addresses decision and risk analysis, methods for structuring and modelling project and product management decision problems, and application of methods to a variety of project and product development situations that involve risk and uncertainty related to the definition and production. Risk modelling approaches are examined, including the Australian and New Zealand Standard AS/NZS 4360 and triple bottom line risk management: risk treatments are developed and a plan for their implementation developed.

Project & Innovation Finance & Accounting: This course is designed to take managers through the essential knowledge and skills development in areas such as: accrual accounting concepts, understanding and analysing financial statements, cash flow, company accounting, budgeting and planning, and an introduction to management accounting and activity based costing.

This course introduces financial modelling and analysis of project proposals. Major topics include the time value of money and capital budgeting processes, depreciation, capitalisation and valuation, sensitivity analysis, and value management. It includes familiarisation with and use of computer software applications for use in selecting projects.

Applied Project Management 1: Applied Project Management 1 is the foundation course in the Master of Project Management degree. This course explores the overall scope of project management and its role in organisations to achieve corporate goals. The course also looks at how project management differs from general management, in terms of the short term nature of projects compared with the relatively enduring nature of organisations, the different reporting requirements for costs and the need for special contracts for projects, as well as many other aspects.

The objectives of projects are usually focussed on Performance, Cost and Time, although safety, quality improvements or an increase in sales, could be objectives.

Business & Contract Legal Studies: This course integrates the issues of focusing the organization acting as project sponsor in order to be more effective in accommodating the projects, which they spawn, and the administration of these contracts. Key issues addressed in the organizational effectiveness sector are scenario planning, business strategy and identifying core competencies, understanding customers' requirements, leadership, managing the supply chain and process re-engineering the host organization.

Rarely are projects executed without some expertise or components being sourced externally or from other business units within an organisation. This course provides students with an overview of Contract Law, an understanding of the key processes in managing internal agreements and formal contracts, including procurement strategies and contract options, contract documentation, tendering, evaluating and selection, contract administration, claims management, negotiation and dispute resolution.

Applied Project Management 2: This course is designed to be a top-level course in the Master of Project Management. It focuses on the management of organisations which deliver projects. Areas covered include development of strategy for business success, the identification of processes to achieve business goals and the broader use of enterprise architecture for delivery through information processes. The use of six sigma quality techniques to achieve consistent goals and the use of project management maturity model for developing project management capability of the organisations is also focused on. The values of project delivering organisations and the additional skills required for project directors are also examined.

Project Management Techniques: This course is the intermediate core course between Applied Project Management 1 and Applied Project Management 2 in the Master of Project Management. It covers the management techniques required to achieve outcomes on projects in each of the areas of scope, time, cost, quality, procurement, human resources and communication. Further development of scenarios and the use of project management in various industries, including Information technology, defence, construction, roll-out of government services, social, finance, medical, research and commercialisation occurs.

Elective Courses:

Complex Project Management 1: The objectives of this course are to define and manage projects, which undergo substantial changes in requirements,

and consequently have high levels of emergence, high internal and external system complexity and usually have large life cycle costs. They require the project team to learn during the life of the project in order to clarify what is required and consequently how to deliver it. Examples of such projects include complex defence projects, projects which include multiple powerful stakeholders such as multi-nationals, the United Nations and the World Bank; achieving climate change objectives is a further example.

The course recognises the skills of Systems Engineering however it contrasts these with the Soft System Methods required to define the developing project. These include Rich pictures, Root definition and CATWOE, Total Systems Intervention, Decision trees & influence diagrams, Cognitive mapping or mind maps, Strategic Assumption Surface Testing, Scenario planning, Repertory grid, Delphi methods, Total systems intervention, Critical systems thinking, Total systems intervention and Real options. Once scope is clear the traditional project management methods can be used.

Managing Product Design & Development: Addresses the many and best practices organisations are using to accelerate the product development and production processes. Students develop case studies of methodologies for managing the technology and product development cycle.

Financial Quantitative Procedures: This purpose of this course is to provide students with basic mathematical and statistical concepts to analyse, value and manage investment portfolios. Students are also exposed to more advanced topics of data analysis. Emphasis is placed on the extensive use of computer statistical packages, e.g. SAS, SPSS, to perform data analysis. Students are expected to have hands-on experience in application of quantitative methods to problems of investment.

Technology Project Management 1: This course is designed to develop understanding and knowledge in project managing software projects. There have been many high-profile failures in software projects, with over-runs in time, costs and failure to deliver requirements and capability.

Some of these failures are due to the nature of software and some are due to software project managers not employing approaches practised by project managers in other disciplines such as defence, construction and manufacturing.

The course covers the development of requirements, the selection of a management framework, effort estimation, understanding risks and achieving quality and configuration management. A project plan for a software project is developed.

Marketing Management: Marketing lies at the core of all business. Whatever the character or size of your entity, its profit can come from only one place; the marketplace. All businesses are dependent on the income they earn from their customers, clients or buyers. In most larger businesses it is marketing managers who are primarily responsible for keeping their company close to its customers. In any case, all those who have a direct responsibility for identifying, reaching and satisfying customers are engaged in marketing and everybody in a business needs to understand its marketplace activities. This course offers a complete introduction to professional marketing thought and action.

Economics for Management: This course provides an introduction to economic thinking and its relevance and application to managing organisations. The first part of the course deals with the structure of markets, including perfect competition, monopoly and oligopoly, and the competitive regulatory environment. The second part deals with the determinants of the aggregate level of output and employment, and elements in the determination of macroeconomic policy including interest rates, inflation and foreign trade and capital flows. The focus of the course is on current issues and their implications for managers and competitive organisations.

Quality Management: This course explores the Quality Management, its functions and contributions to the business and especially its role in Project Management. It also looks at the specific skills and knowledge required for good Quality Management System, professional disciplines, good practices and their key indicators for success.

Business and Project Creation: This course examines the innovation and entrepreneurial skills required to identify and develop business and project opportunities in a technology context. These include understanding the importance of innovation and entrepreneurship to economies, industry and competitive analysis, role of foresight, innovation and entrepreneurship processes, competitive analysis and business and project strategy, establishing feasibility and organising finance, legal and governance issues of establishing a business and finally developing the business. The objectives are to build understanding and skills in participants to equip them to achieve actual business and project creation.

Logistics and Supply Chain Management: The objectives of this course are to develop understanding of maintenance and support planning and competence in ILS techniques, such that ILS concerns are effectively considered in the system acquisition and development cycle; and, understand the implications of an extended supply chain and design systems and provide competence to address it.

The course content introduces participants to the issues and basic principles of Integrated Logistics Support of complex equipment and field systems. Principles for describing and specifying ILS requirements are addressed so that they can be “designed into” a system. This course provides managers or participants involved in management, development, acquisition and support of systems with the understanding of the key issues required to effectively specify and manage acquisition and operational support.

Content includes the role of the various components of logistics, Measures of logistic effectiveness, Logistics issues in the design and development phases, including design for maintainability, reliability modelling, FMEA and FMECA, Fault tree analysis and Reliability centred maintenance. Also included are Logistic issues in the production/construction phases, Logistics in the utilisation and support phases, Human factors in ILS.

Finally integration of the supply chain is addressed including flow of information, materials, services, manpower and money across the supply chain, coordinating technology across tiered suppliers, creation of trust, Enterprise Architecture in the supply chain, purchasing issues, issues of the customer’s customer integrated with the supplier’s supplier, and, waste and minimising transaction costs.

Introduction to Climate Change: The objectives of this course are to have a general understanding of the science of climate change. Content describes the carbon cycle, the scientific basis of Climate Change and the predictions of what the physical effects of Climate Change will be, the cause of CO2 emissions, and where they occur in the supply/distribution chain, the broader impacts of Climate Change for key industries, including corporate reputation, market forces, regulation and physical assets. The role of carbon trading and tax schemes. Examples of domestic and international responses to Climate Change.