

## MODULE SPECIFICATION FORM

Module Title: Project Risk Management	Level: 7	Credit Value: 20
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Module code: BUS778	Cost Centre: GAMP	JACS2 code: N213
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Semester(s) in which to be offered: 2	With effect from: January 2014
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<b>Office use only:</b> To be completed by AQSU:	Date approved: August 2013 Date revised: January 2015 Version no: 2
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Existing/New: New	Title of module being replaced (if any): N/A
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Originating Academic Department: Business and Management	Module Leader: Ben Binsardi
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Module duration (total hours): 200 Scheduled learning & teaching hours: 39 Independent study hours: 161 Placement hours	Status: core/option/elective (identify programme where appropriate):  Core: MSc Project Management
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Programme(s) in which to be offered: MSc Project Management	Pre-requisites per programme (between levels): None
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<b>Module Aims:</b>  To provide an advanced understanding of the processes and techniques for identification, analysis and management of risks and uncertainties inherent in major projects.
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To develop students' skills so that they may be effective project managers and contribute to improved project performance in terms of meeting client's primary project objectives of cost, time, quality, environmental sustainability, and health and safety.

### **Expected Learning Outcomes:**

At the end of this module, students will be able to:

Knowledge and Understanding:

1. Evaluate the principles of risk analysis, management and decision making within the context of project management.
2. Critically apply qualitative and quantitative tools and techniques of risk analysis.
3. Critically examine and analyse the effects of risk and uncertainty on major projects and synthesis solutions from a corporate perspective.

Transferable/Key Skills and other attributes:

Work with self-direction in order to make a positive contribution to project delivery  
Preparing complex project risk assessments  
Effective dissemination of information  
Decision-making techniques  
Setting priorities  
Effective written communication  
Evaluate and integrate theory and practice in a wide range of situations  
Use of information technology

**Assessment:** please indicate the type(s) of assessment (e.g. examination, oral, coursework, project) and the weighting of each (%). ***Details of indicative assessment tasks must be included.***

The module will be assessed through coursework and an essay.

Indicative assessment: (1) students will be given a case study that will simulate a real world problem situation that requires students to analyse risk using a range of tools and techniques and adopt a professional approach to demonstrate project risk identification, analysis and management strategy in a project scenario. (2) Students will be required to undertake research and write a report that critically evaluates the options for risk management approaches at both a project, programme and portfolio level within a corporate setting.

Assessment number	Learning Outcomes to be met	Type of assessment***	Weighting	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,2	Coursework	50%		3,000
2	3	Report	50%		3,000

### **Learning and Teaching Strategies:**

Lectures and tutorials will be structured in an interactive manner and utilise technology to illustrate theory in practice and provide opportunities for peer interaction to enhance competence. Students will be engaged in the practical application of risk identification analysis and management response techniques and theory as applied to both projects and corporate perspectives. The use of case studies and contemporary projects from a range of sectors drawn from a national and international perspective will provide situations to demonstrate the acquisition of relevant knowledge, functions and processes supported by rational analysis in a tutorial setting and provide frequent opportunities for peer interaction.

### **Syllabus outline:**

Philosophy of risk. Risk management methodology. Risk identification. Risk analysis, Management response to risk. Major sources of risk and uncertainty. Decision making involving risk and uncertainty. Cognitive processes. Individual decision behaviour. Group decisions.

Expected monetary value. Decision tree analysis. Sensitivity analysis. Value of perfect information. Elicitation of Probabilistic information. Utility Theory. Multi-attribute utility Theory. Risk Analysis software.

Risk allocation in contracts. Insurance and bonds. Risk in PFI/PPP Projects. Occupational Health and safety risks. Risk in international project investments. Portfolio Theory and Practice. Firm-wide risk management. Role of a risk manager. Professional ethics, Case studies.

### **Bibliography:**

#### **Essential reading:**

Chapman, C. and Ward, S. (2011), *How to Manage Project Opportunity and Risk*. Chichester: Wiley

Goodwin, P. and Wright, G. (2009), *Decision Analysis for Management Judgement*. 4<sup>th</sup> ed. Chichester: Wiley

**Other indicative reading:**

Project Management institute (2009), *Practice Standard for Project Risk Management*. Pennsylvania, USA: PMI

Gilboa, I. (2011), *Making Better Decisions: Decision Theory in Practice*. Chichester: Wiley-Blackwell

Winston, W. (2008), *Financial Models Using Simulation and Optimisation: A Step by Step Guide With Excel and Palisade's Decision Tools Software*. New York: Palisade Corporation

Winston, W. (2008), *Financial Models Using Simulation and Optimisation II: Investment Valuation, Options Pricing, Real Options, and Product Pricing Models*. New York: Palisade Corporation

Ayyub, B. M. (2014), *Risk Analysis in Engineering and Economics*, 2<sup>nd</sup> ed. London: Chapman and Hall/CRC

Pike, R., Neale, B. and Linsley, P. (2012), *Corporate Finance and Investment: Decisions and Strategies*. 7<sup>th</sup> ed. Edinburgh: Pearson Education

Gatti, S. (2012), *Project Finance in Theory and Practice: Designing, Structuring and Financing Private and Public Projects*. 2<sup>nd</sup> ed. Chichester: Wiley-Blackwell

Badiru, A.B. and Osisanya, S. O. (2013), *Project Management for the Oil and Gas Industry, A World Systems Approach*. London: CRC Press

**Journals:**

Risk Management: A journal of risk, crisis and disaster  
International Journal of Risk Assessment and Management  
Management Decision  
International Journal of Project Management  
Project Management Journal

**Websites:**

[www.palisade.com](http://www.palisade.com)