

HONG KONG IGDS - MSC MODULE OUTLINE

Subject Title	IGDS Dissertation																	
	<i>HK PolyU</i>	<i>WarwickU</i>																
Subject Code	ISE5771																	
Credit Value	12	60																
Level	Level 5	Taught Postgraduate Level																
Pre-requisite/ Co-requisite/Exclusion	The student is expected to complete a few modules before starting the dissertation.																	
Introduction	Individual MSc project is a thesis type assignment. It requires students to draw on their comprehensive knowledge of many topics covered in the programme to investigate an industrial related project and formulate recommendations and solutions.																	
Objectives	<p>No 1 To constitute an ordered critical and reasoned exposition of knowledge in an approved field and shall afford evidence of knowledge of the relevant literature, and be submitted in accordance with the appropriate programme regulations.</p> <p>No 2 To apply knowledge to achieve objectives by formulating solutions systematically.</p>																	
Intended Learning Outcomes (ILO's) (Note 1)	<p>Upon completion of the subject, participants will be able to:</p> <p>No 1 Acquire in-depth knowledge of engineering business management techniques or manufacturing systems know-how demonstrated in the project report.</p> <p>No 2 Develop a critical awareness of engineering business or manufacturing issues with strategic thinking and analytical power.</p> <p>No 3 Develop cognitive skills in becoming an effective learner in making judgement, innovation and decisions in engineering business or manufacturing organisations.</p>																	
Teaching/Learning Methodology (Note 2)	<p>Two half-day project workshop enables students to learn about project formulation, methodology, literature review, exploratory data analysis, project writing and presentation skills. Extra consultation sessions are also held to offer advice to students for problem identifications and experience sharing.</p> <p>Frequent meetings between the supervisors and students will be organised by the supervisor and student concerned. The academic supervisor monitors the progress and gives guidance and advice to the student during the project period.</p> <p>Academic Supervisor of a project student is expected to give advice and assess industrially suitability of the project report.</p> <p><u>Alignment between Teaching/Learning Methodologies and ILOs:</u></p> <table border="1"> <thead> <tr> <th rowspan="2">Teaching/Learning Methodologies</th> <th colspan="3">Intended Subject Learning Outcomes to be assessed</th> </tr> <tr> <th>No 1</th> <th>No 2</th> <th>No 3</th> </tr> </thead> <tbody> <tr> <td>Lecture</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>Discussion/meetings</td> <td>√</td> <td>√</td> <td>√</td> </tr> </tbody> </table>			Teaching/Learning Methodologies	Intended Subject Learning Outcomes to be assessed			No 1	No 2	No 3	Lecture	√	√	√	Discussion/meetings	√	√	√
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	No 1	No 2	No 3															
Lecture	√	√	√															
Discussion/meetings	√	√	√															

Assessment Methods in Alignment with Intended Learning Outcomes <i>(Note 3)</i>	Assessment Methods/ Tasks	% Weight	Intended Learning Outcomes (ILO's)		
			No 1	No 2	No 3
	1. Dissertation Mark given by Academic Supervisor	50	√	√	√
	2. Dissertation Mark given by Second Assessor	50	√	√	√
Total	100				
<p>The dissertation is a comprehensive report addressing operational, technical, financial, human resourcing or strategic management issues of business engineering or manufacturing systems activities. Participants are expected to indicate project objectives, identify possible constraints and difficulties, conduct a critical analysis of current situations through scientific or research methodologies so as to reach feasible recommendations and solutions. Student performance on the project report becomes the predominant assessment method.</p>					
Student Study Effort Required	Class Contact:				
	▪ 2 half-day Project Workshop		10 Hours		
	▪ Meetings and Discussion		20 Hours		
	Other Participant Study Effort:				
	▪ Project/Research/Field Work		300 Hours		
	▪ Report Writing		270 Hours		
	Total Participant Study Effort		600 Hours		
Reading List and References	<ol style="list-style-type: none"> 1. Alison, D.E., "The Project Report - a Guide for Participants", University of Aston Computer Centre 2. Barrass, R., "Scientists Must Write", Chapman Hall 3. Cooper, B.M., "Writing Technical Reports", Penguin, 1969 4. Gowers, Sir Ernest, "The Complete Plain Words", HMSO 5. Greenfield Tony, "Research methods: guidance for postgraduates", Arnold, 1996, 1st Edition. 6. Hussey J. and Hussey R, "Business Research: A practical guide for undergraduate and postgraduate participants", MacMillan Press Ltd, 1997, 1st Edition. 7. Lamb, John D, (2001, February) "Writing a Dissertation with Microsoft Word", [Online], http://www.uyea.btinternet.co.uk/docs/word_dissertation.pdf [Dec 07] 8. Rathbone, R.R., "Communicating Technical Information", Addison-Wesley 9. Robertson, W.S. et al, "Technical Writing and Presentation", Pergamon 10. Rudestam K. E. and Newton R. R. "Surviving your dissertation", Newbury Park: Sage Publications, 1992. 11. Van Emden, J. & Eastaerl, J., "Technical Writing & Speaking; An Introduction", McGraw Hill, 1996 12. Van Emden, J., "A Handbook of Writing for Engineers", Macmillan, 1990. 				

Note 1: Intended Learning Outcomes

Intended learning outcomes state what students should be able to do or attain upon completion of the subject. Subject outcomes are expected to contribute to the attainment of the overall programme outcomes.

Note 2: Subject Synopsis/ Indicative Syllabus

The syllabus adequately addresses the intended learning outcomes. At the same time over-crowding of the syllabus has been avoided.

Note 3: Teaching/Learning Methodology

This section includes a brief description of the teaching and learning methods to be employed to facilitate learning, and a justification of how the methods are aligned with the intended learning outcomes of the subject.

Note 4: Assessment Method

This section includes the assessment method(s) used and its relative weighting, and indicates which of the subject intended learning outcomes that each method assesses. It also provides a brief explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes.