

# HONG KONG IGDS - MSC MODULE OUTLINE

<b>Subject Title</b>	<b>Logistics &amp; Operations: Strategy &amp; Management (LO:SM)</b>	
	<i>HK PolyU</i>	<i>WarwickU</i>
<b>Subject Code</b>	ISE5762	WM9F4-15
<b>Credit Value</b>	3	15
<b>Level</b>	Level 5	Taught Postgraduate Level
<b>Pre-requisite/ Co-requisite/Exclusion</b>	None but some preliminary reading of logistics & operations: strategy & management would be beneficial.	
<b>Introduction</b>	<p>Operations strategy is concerned with how the organisation deploys its operational resources over the long term to help it respond to broad questions such as how resources which deliver the company's products and services should be deployed to achieve its corporate objectives. These long-term decisions are focussed around procurement, logistics, capacity, location, processes, technology, and timing. Operations management involves transforming inputs (capital, labour and materials) efficiently and effectively into outputs valued by the end customer in manufacturing or service environments. Logistics is recognised as a key function in meeting market requirements quickly, flexibly and without incurring punitive inventory costs. To be competitive companies need to manage operations and logistics both internally and externally across all their supply chains.</p>	
<b>Objectives</b>	<p>No 1 To understand the way in which operations strategy is both derived from, and informs and supports, the organisational/business strategy.</p> <p>No 2 To critically evaluate and apply a range of tools, techniques and technologies suitable for different industrial and service contexts.</p>	
<b>Intended Learning Outcomes (ILO's) (Note 1)</b>	<p>Upon completion of the subject, participants will be able to:</p> <p>No 1 describe the strategic role of logistics and operations management and its importance in designing, delivering and improving the logistics and operations functions.</p> <p>No 2 explain the interrelationships and interdependencies between capacity, inventory and delivery performance.</p> <p>No 3 critically evaluate how to manage capacity, inventory and delivery to achieve effective and efficient operational performance.</p> <p>No 4 compare and contrast different tools and techniques for the planning and control of logistics and operations management in order to justify their use in a variety of operational environments.</p> <p>No 5 critically appraise how appropriate technologies can be applied to improve operations management within a supply chain.</p> <p>No 6 critically assess how best to optimise an organisation's supply chain using agile methods to increase resilience.</p>	
<b>Indicative Syllabus Topics (Note 2)</b>	<p>No 1 The interrelationship between the organisation's business and operation's strategy and its influence in creating and evaluating the logistics and operations management functions</p> <p>No 2 Planning &amp; control techniques for forecasting demand, capacity management, scheduling and sequencing and inventory management</p>	

	<p>No 3 Planning &amp; control systems and methodologies (e.g. Material Requirements Planning (MRP), Manufacturing Resource Planning (MRPII), Enterprise Resource Planning (ERP), Just In Time)</p> <p>No 4 The role of Total Quality Management methodologies, including ISO9000, Six Sigma, EFQM within logistics and operations management</p> <p>No 5 Examples of applications of logistics and operations management in a range of industries, including manufacturing and service environments</p>																																						
<p><b>Teaching/Learning Methodology</b> (Note 3)</p>	<p>A combination of lectures, case studies and joint venture exercises are used to deliver the various topics in this module. Some of which will be covered in a problem-based format where this enhances the learning objectives and learning outcomes. The case studies are mainly based real life situations. These integrate the topic covered and thus demonstrate how the various techniques are inter-related and how they apply in real life situations.</p> <p><u>Alignment between Teaching/Learning Methodologies and ILOs:</u></p> <table border="1" data-bbox="583 774 1450 953"> <thead> <tr> <th>Teaching/Learning Methodologies</th> <th colspan="6">Intended Subject Learning Outcomes to be assessed</th> </tr> <tr> <th>No</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>Lecture</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>Case studies</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> </tr> </tbody> </table>	Teaching/Learning Methodologies	Intended Subject Learning Outcomes to be assessed						No	1	2	3	4	5	6	Lecture	√	√	√	√	√	√	Case studies	√	√	√	√	√	√										
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<b>Reading List and References</b>	The list given to participants is exhaustive and embraces all the topics covered in the module plus industrial engineering handbooks. In total there are about 20 references provided; too numerous to be listed here. They can be found in the Folder Notes given to participants at the commencement of the module.
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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.