



University/Academy: Arab Academy for Science and Technology & Maritime Transport

Faculty/Institute: College of Computing and Information Technology

Program: Information Systems

Course title	Integrated Information Systems Management
Course code	IS478

Form no. (11A)  
Knowledge and skills matrix for a course

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
<b>Business Functions, Processes, and Data Requirements</b>	1	<ul style="list-style-type: none"> <li>Name a business's main functional areas of operation.</li> <li>Differentiate a business process from a business function.</li> <li>Identify the kinds of data that each main functional area produces.</li> <li>Identify the kinds of data that each main functional area needs.</li> <li>Define integrated information systems and state why they are important.</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.		<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
<b>The Development of Enterprise Resource Planning Systems (part 1)</b>	2	<ul style="list-style-type: none"> <li>Identify the factors that led to the development of Enterprise Resource Planning (ERP) systems.</li> <li>Describe the distinguishing characteristics of ERP software.</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Analyze the project (Business Process)	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>
<b>The Development of Enterprise Resource Planning Systems (part 2)</b>	3	<ul style="list-style-type: none"> <li>Discuss the pros and cons of implementing an ERP system.</li> <li>Summarize ongoing developments in ERP.</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Construct the Process Activity Task Matrix that is needed to automate the (Business Process)	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>
<b>Marketing Systems and The Sales Order Process</b>	4	<ul style="list-style-type: none"> <li>Describe the unintegrated sales processes of the fictitious Fitter Snacker company.</li> <li>Explain why unintegrated Sales and Marketing information systems lead to company-wide inefficiency, higher costs, lost profits, and customer dissatisfaction.</li> <li>Discuss sales and distribution in SAP's R/3 system, and</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Design the solution for the project (Business Process)	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>

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		<p>explain how integrated data sharing increases company-wide efficiency.</p> <ul style="list-style-type: none"> <li>Describe how SAP R/3 processes a standard sales order.</li> </ul>			
<b>SAP's CRM Software</b>	5	<ul style="list-style-type: none"> <li>Describe the core CRM Activities</li> <li>Describe the benefits of Customer Relationship Management software, a useful extension of ERP software.</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Implement the solution using your programming skills, and your experience with Database management systems	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>
<b>Production and Supply Chain Management Information Systems (part 1)</b>	6	<ul style="list-style-type: none"> <li>Describe the steps in the production planning process of a high-volume manufacturer such as Fitter Snacker.</li> <li>Describe Fitter Snacker's production and materials management problems</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Implement the solution using your programming skills, and your experience with Database management systems	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>
<b>7<sup>th</sup> week Exam</b>	7				

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
<b>Production and Supply Chain Management Information Systems (part 2)</b>	8	<ul style="list-style-type: none"> <li>Describe how a structured process for production and materials management planning enhances efficiency and decision making</li> <li>Describe how production planning data in an ERP system can be shared with suppliers to increase supply-chain efficiency.</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.	Implement the solution using your programming skills, and your experience with Database management systems	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>
<b>Accounting in ERP Systems</b>	9	<ul style="list-style-type: none"> <li>State the difference between financial and managerial accounting.</li> <li>Identify and describe problems associated with accounting and financial reporting in un-integrated information systems.</li> <li>Describe how ERP systems can solve accounting and financial reporting problems in an un-integrated system.</li> <li>Describe how the Enron scandal and the Sarbanes-Oxley Act will affect accounting information systems.</li> <li>Explain accounting and management reporting benefits that accrue from having an</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.		<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
		ERP system.			

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
<b>Human Resources Processes with ERP</b>	10	<ul style="list-style-type: none"> <li>• Explain why the Human Resources function is critical to the success of a company</li> <li>• Describe the key processes managed by a Human Resources Department</li> <li>• Describe how an integrated information system can support effective Human Resources processes</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.		<ul style="list-style-type: none"> <li>• Verify theory with practice.</li> </ul>
<b>Process Modeling, Process Improvement, and ERP Implementation</b>	11	<ul style="list-style-type: none"> <li>• Use basic flowcharting techniques to map a business process</li> <li>• Develop an Event Processing Chain (EPC) diagram of a basic business process</li> <li>• Evaluate the value added by each step in a business process</li> <li>• Develop process improvement suggestions</li> <li>• Discuss the key issues in managing an ERP implementation project</li> <li>• Describe some of the key tools used in managing an ERP implementation project</li> </ul>	. Identify a range of solutions and critically evaluate and justify proposed design solutions.		<ul style="list-style-type: none"> <li>• Verify theory with practice.</li> </ul>
<b>12<sup>th</sup> week Exam</b>	12				

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
<b>ERP and Electronic Commerce</b>	13	<ul style="list-style-type: none"> <li>Describe business-to-business e-commerce</li> <li>Explain why ERP is essential to the success of a company engaged in e-commerce</li> <li>Describe what an application service provider (ASP) does</li> <li>Describe how ERP is delivered to users by an ASP</li> <li>Describe Web services and SAP's NetWeaver</li> <li>Describe the unique components of NetWeaver</li> <li>Explain why accessing an ERP system through a Web browser is efficient</li> <li>Define XML and its significance to ERP</li> <li>Define RFID and its future role in logistics and sales</li> </ul>	Identify a range of solutions and critically evaluate and justify proposed design solutions.		
<b>Project Individual Presentations</b>	14		Perform problem analysis from written descriptions; derive requirements specifications from an understanding of	<ul style="list-style-type: none"> <li>Measure the student programming skills.</li> <li>Display the student experience with DBMS</li> </ul>	<ul style="list-style-type: none"> <li>Verify theory with practice.</li> </ul>

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
			problems (analysis, synthesis). •		
<b>Project Individual Presentations Continued</b>	15		Perform problem analysis from written descriptions; derive requirements specifications from an understanding of problems (analysis, synthesis). •		

**Course Instructor**

Name:

Signature:

**Head of Department**

Name:

Signature: