

Course unit title:	Decision Support Systems (DSS)
Course unit code:	INS610
Type of course unit: (Compulsory/optional)	Optional
Level of course unit: (First, second or third cycle)	Master (2 nd Cycle)
Year of study:	1 or 2
Semester when the unit is delivered:	2 or 3
Number of ECTS credits allocated:	8
Name of lecturer(s):	TBA
Learning outcomes of the course unit:	
<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Explain the general theory of decision making and decision support. • Illustrate how decision support knowledge can be translated into specific decision support needs. • Explain the application of Artificial Intelligence in decision support. • Illustrate the various types of DSS and how they can be used in business intelligence. • Illustrate and apply computational models in decision support. • Design and evaluate DSS interfaces. 	
Mode of delivery:	Face- to- face
Prerequisites and co-requisites:	None
Recommended optional program components:	None
<p>Course Contents: Objective: The course seeks to develop students' understanding of the theoretical and technological aspects of decision support in the business context. The primal aim of the course is to demonstrate to students how to associate decisions with computerized IS, formulate decision-making problems and use decision-making approaches to arrive at business solutions. The material explains principles of decision-support frameworks and introduces methods for assessing tradeoffs associated with operational decisions. This is related to specific objectives 3, 5 and 9.</p>	

Description:

Supporting business decision-making:

Demonstrate how DSS can assist in supporting business decision-making for gaining competitive advantage; introduction to the theory of decision making and the various types of DSS; introduction to group DSS.

Intelligent Decision Support

Illustrate how Artificial Intelligence can enhance decision-making. Apply stochastic and deterministic approaches of decision support in operational, tactical and strategic levels.

Designing and developing DSS:

Demonstrate and apply the process of developing DSS and how this differs from other business IS, understand DSS architecture, networking, and security issues.

Designing and evaluating DSS user interfaces:

Apply key concepts of user interface design for enhanced decision-making. Introduction to usability evaluation techniques.

Building knowledge-driven DSS and mining data:

Illustrate how data is converted to information and subsequently knowledge that can support managerial decision-making; explain data mining and data warehousing.

**Recommended
or
required reading:**

Turban, E., Shandra, R., & Delen, D. (2011). Decision Support and Business Intelligence Systems, 9th Edition. Pearson.

Sauter, V. (1997). Decision Support Systems. New York, NY: Wiley & Sons.

Power, D.J. (2002). Decision Support Systems: Concepts and Resources for Managers. Quorum Books Division: Greenwood Publishing.

Adair, J. (1997). Decision Making and Problem Solving Strategies. Kogan Page.

De Bono E. (1985). Six Thinking Hats: An Essential Approach to Business Management. Boston, MA: Back Bay Books

Hogarth R. (1987). Judgement and Choice: The Psychology of Decision. New York, NY: Wiley & Sons.

Pfeffer, J., & Sutton, R. (2000). The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action. Harvard Business School Press.

	Proctor, T. (1999). Creative Problem Solving for Managers. London, UK: Routledge.						
Planned learning activities and teaching methods:	<table border="1"> <tr> <td>Class Instruction</td> <td>42 Hours</td> </tr> <tr> <td>Consultation</td> <td>30 Hours</td> </tr> </table>	Class Instruction	42 Hours	Consultation	30 Hours		
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Assessment methods and criteria:	<table border="1"> <tr> <td>Examinations</td> <td>50%</td> </tr> <tr> <td>Group Project/ Class Participation</td> <td>50%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Examinations	50%	Group Project/ Class Participation	50%		100%
Examinations	50%						
Group Project/ Class Participation	50%						
	100%						
Language of instruction:	English						
Work placement(s):	No						
Place of Teaching:	Regular Classroom European University Cyprus, Nicosia						