

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	ENGINEERING		
<b>ACADEMIC UNIT</b>	FINANCIAL AND MANAGEMENT ENGINEERING		
<b>LEVEL OF STUDIES</b>	7		
<b>COURSE CODE</b>	<b>I/II/III-1</b>	<b>SEMESTER</b>	<b>1<sup>ST</sup></b>
<b>COURSE TITLE</b>	STRATEGY MANAGEMENT FOR ENGINEERS		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
	3	6	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	Stream Obligatory		
<b>PREREQUISITE COURSES:</b>	None		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	NO		
<b>COURSE WEBSITE (URL)</b>	<a href="https://aegeanmoodle.aegean.gr/course/view.php?id=4534">https://aegeanmoodle.aegean.gr/course/view.php?id=4534</a> <a href="http://odim.aegean.gr/?q=el/node/22">http://odim.aegean.gr/?q=el/node/22</a>		

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b> <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p>Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand basic concepts of Management and Strategy</li> <li>• Analyze the external environment of a business</li> <li>• Understand the concepts of resources and capabilities and explore how they are built so that a firm can achieve a competitive position in the market</li> <li>• Recognize the strategic options that a business may have available and be able to suggest specific options (areas in which the business can expand, products or services it can offer, methods to achieve this expansion – acquisitions, mergers, partnerships, etc.)</li> <li>• Understand the concept of competitive advantage</li> <li>• Recognize that for the implementation of the chosen strategy structures,</li> </ul>

systems and human resources should be mobilized inside and outside the company

- Understand the course and evolution of industrial sectors and markets and the effect of technological developments on them •
- Recognize the importance of technology standards and their economic implications
- Understand the key components of a company's technology strategy

#### General Competences

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of new research ideas*

*Project planning and management*

*Respect for difference and multiculturalism*

*Respect for the natural environment*

*Showing social, professional and ethical responsibility and sensitivity to gender issues*

*Criticism and self-criticism*

*Production of free, creative and inductive thinking*

*.....*

*Others...*

*.....*

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of free, creative and inductive thinking*

### (3) SYLLABUS

#### Course Contents

1. Introduction – Basic concepts, definitions and scope of Management and Strategy
2. External Environment Analysis (Macro-environment, Industry analysis, Competitors, Buyers)
3. Analysis of the Internal Environment, Resources & Capabilities
4. Competitive Advantage
5. Alternative Strategic Options
6. Alternative Strategy Evaluation Methods & Strategy Analysis Tools (BCG Matrix)
7. Elements of Technology Strategy I: The Dynamics of Industries and Markets
8. Elements of Technology Strategy II:
  - Technology Protection Strategies
  - Technological standards and their economic importance
9. Strategy and Entrepreneurship
  - The concept of the Business model and its forms
  - Open innovation
10. Recapitulation and Summary

#### (4) TEACHING and LEARNING METHODS - EVALUATION

<p><b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i></p>	<p>Teaching method: The teaching of the course is based on lectures and presentation/discussion of case studies. Active student participation is essential and helps to understand the key concepts and tools of the course. At the same time, through the presentation of examples from the Greek and international context, students have the opportunity to understand the complex processes that take place in the business environment and to contribute to the critical evaluation of the various methods and approaches that are proposed and applied.</p>																							
<p><b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i></p>	<p>Use of ICTs in teaching and in communication with students</p>																							
<p><b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i></p> <p><i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i></p>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Semester workload</i></th> </tr> </thead> <tbody> <tr> <td>Lecture</td> <td>30</td> </tr> <tr> <td>Analysis of bibliography</td> <td>30</td> </tr> <tr> <td>Joint Project work</td> <td>30</td> </tr> <tr> <td>Individual case study</td> <td>20</td> </tr> <tr> <td>Non-directed study</td> <td>37</td> </tr> <tr> <td>Exams</td> <td>3</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>Course Total</b></td> <td><b>150 hours</b></td> </tr> </tbody> </table>		<i>Activity</i>	<i>Semester workload</i>	Lecture	30	Analysis of bibliography	30	Joint Project work	30	Individual case study	20	Non-directed study	37	Exams	3							<b>Course Total</b>	<b>150 hours</b>
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<p><b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i></p> <p><i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>Method of assessment and grading:</p> <ul style="list-style-type: none"> <li>• One group work (max 5 people) (30%). Students will apply the conceptual tools and methods discussed in the course to a business of their choice. The assignments will be sent electronically to the tutor. The last date for handing in assignments is the 10th day after the course exam date. Detailed instructions regarding the structure of the assignments will be given by the tutor during the course. The assignments must necessarily contain: <ul style="list-style-type: none"> <li>○ Cover page (title of Master's Program, course, subject of work, names of students and MA, and date of preparation)</li> <li>○ Table of contents</li> <li>○ Bibliography according to the APA Referencing System (<a href="https://apastyle.apa.org/style-">https://apastyle.apa.org/style-</a></li> </ul> </li> </ul>																							

	<p style="text-align: center;">grammar- guidelines/references/examples)</p> <ul style="list-style-type: none"> <li>• Group Case Study Presentation (10%) (from those suggested per week – see last page in detailed course content below)</li> <li>• A Final Exam (60%) on all the material taught</li> </ul>
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#### (5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Barney, J and Hesterly W. (2022) *Στρατηγικό Μάνατζμεντ και Ανταγωνιστικό Πλεονέκτημα*, (6<sup>η</sup> έκδοση), Εκδόσεις Τζιόλα.
- Β. Παπαδάκης (2016) *Στρατηγική των Επιχειρήσεων: Ελληνική και Διεθνής Εμπειρία*, Τόμος Α: Θεωρία, (7<sup>η</sup> Έκδοση), Αθήνα: Εκδόσεις Μπένου.
- Johnson, G., Whittington, R. Scholes, K. et.al (2016), *Βασικές Αρχές Στρατηγικής των Επιχειρήσεων*, 2<sup>η</sup> Έκδοση, Αθήνα: Εκδόσεις ΚΡΙΤΙΚΗ.
- Schilling, M. (2016). *Η Στρατηγική Διοίκηση της Τεχνολογικής Καινοτομίας*, Αθήνα: Εκδόσεις Επιστημών, Broken Hill Publishers (Επιστ. Επιμέλεια- Πρόλογος: Α, Κωνσταντέλου, Α. Τσακανίκας).
- Grant Robert and Judith Jordan (2015) *Βασικές Αρχές Επιχειρηματικής Στρατηγικής* (2<sup>η</sup> Αμερικανική Έκδοση) Αθήνα: Εκδόσεις Κλειδάριθμος
- Thompson, Arthur, Gamble, John and A. J. Strickland III (2010), *Σχεδιασμός και Υλοποίησης Επιχειρησιακής Στρατηγικής – Η Αναζήτηση Ανταγωνιστικού Πλεονεκτήματος*, 16<sup>η</sup> Αμερικανική Έκδοση, Γενική Επιμέλεια- Πρόλογος: Γιάννης Πολλάλης, Αθήνα: Εκδόσεις Utopia.
- Margaret White and Gary Bruton (2010) *Η Στρατηγική Διαχείριση της Τεχνολογίας και της Καινοτομίας*, Γενική Επιμέλεια- Πρόλογος: Γ. Καλογήρου, Α. Πρωτόγερου, Α, Κωνσταντέλου, Αθήνα: ΚΡΙΤΙΚΗ.

On the website <http://learnstrategy.org/> you can see interesting short videos about the course modules, concepts and tools presented.

Finally, in the KALLIPOS repository the following electronic book is available, which contains material for most sections of the course:

Caloghirou, G., Tsakanikas, A., Siokas, E., Panagiotopoulos, P., Protogerou, A., Mavrotas, G., 2015. *Business Organization and Management for Engineers*. [elec. bibl.] Athens: Association of Greek Academic Libraries. Available at: <http://hdl.handle.net/11419/6032>