Course unit title:	Placement - Internship
Course unit code:	ME325
Type of course unit:	Mechanical Elective
Level of course unit:	Bachelor
Year of study:	3 or 4
Semester when the unit is delivered:	6 or 8
Number of ECTS credits allocated :	6, (144 hours)
Name of lecturer(s):	Mr. Papamichael Theodoulos
Aim of the Course	To provide students with an opportunity to explore career interests in a work environment through applying knowledge and skills learned at their undergraduate courses and labs.
Learning outcomes of	Upon completion of the placement, students are expected to
the course unit:	<ul> <li>Improve their engineering skills by i. acquiring further knowledge, ii. advancing their aptitudes and iii. perfecting their communication skills.</li> <li>Familiarize themselves with the vocational environment of the Mechanical Engineering discipline.</li> <li>Acquire hands-on experience related to the Mechanical Engineering profession, hence integrate smoothly with the work environment.</li> <li>Improve their vocational aptitudes and develop professional consciousness.</li> <li>Prepare them for a successful transition from the academic to the work environment, and develop team working spirit.</li> <li>Increase their level of understanding of the applicability of the theoretical content of their study.</li> <li>Understand the significance of health and safety regulations and practices, when they practice the trade they study.</li> <li>Ability to integrate knowledge from different branches, handle complexity in tasks, understand applicable techniques and methods, their limitations and the non-technical implications of engineering practice.</li> <li>Apply their knowledge and understanding for developing practical skills, solving problems, conducting investigations, and designing engineering devices and processes.</li> <li>Understand the use and limitations of materials, computer modelling, engineering processes, equipment, workshop practice, technical literature and information sources.</li> <li>Recognise the wider, non-technical implications of engineering practice, ethical, environmental, commercial and industrial.</li> </ul>
Mode of delivery:	
Prerequisites:	None Co-requisites: None
Recommended optional program components:	None

Course contents:	<ul> <li>The students are expected to:</li> <li>Work in a company that operates in the area of Mechanical Engineering.</li> <li>Perform the Mechanical Engineering duties they are assigned.</li> <li>Complete a logbook and a calendar of the daily tasks they perform.</li> <li>Make a record of all the decisions they took and their reasoning.</li> <li>Familiarization with Industrial Processes</li> <li>Communication with other Engineers</li> <li>Reading technical manuals and specifications</li> <li>Familiarization with Software for Specific Applications</li> <li>Design and Industrial Automation</li> <li>Problem Solving Techniques</li> <li>Development of Practical skills</li> <li>Use of equipment</li> <li>Business presentation</li> </ul>
Recommended and/or required reading:	All books, manuals and journals related to the internship.
Textbooks:	Engineering Your Future: The Non-technical Side of Professional Practice in Engineering and Other Technical Fields, S.G. Walesh, ASCE Press, 2 <sup>nd</sup> edition, 2000, 497 p.
References:	All books, manuals and journals related to the internship.
Planned learning activities and teaching methods:	<ul> <li>Continuous monitoring of the students by the supervisor (mentor) of the partner organization.</li> <li>Weekly contact of the students with their academic supervisor.</li> <li>Students should complete the logbook using information from the library and manuals available in the partner organization. The information in the logbook should be detailed and self-contained.</li> <li>Students are assessed continuously and their acquired knowledge is checked through an oral presentation where they present what they have accomplished.</li> </ul>
Assessment methods and criteria:	<ul> <li>Technical skills learned (Evaluation by the supervisor of the partner organization) 30%.</li> <li>Evaluation of the logbook (20%).</li> <li>Evaluation by academic supervisor: Professional conduct and Assessment (30%). Oral Presentation 20%</li> </ul>
Language of instruction:	Greek and English
Work placement(s):	Yes