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|  **MECT411 – Capstone Team Project** |
| **Eastern Mediterranean University****Faculty of Engineering** |
| **Department:** Mechanical Engineering |
| **Program Name:** Mechatronic Engineering | **Program Code:** 2A |
| **Course Code:** MECT411 | **Course Title:** Capstone Team Project | **Credits:**3 Cr | **Year/Semester:**2018-2019 Fall |
| [x] Engineering or Area Core [ ] Engineering Course offered by other programs [ ] Engineering or Area Elective [ ] Mathematics and Basic Sciences[ ] General Education |
| **Prerequisite(s):** MECT410  |
| **Catalog Description:** The purpose of the course is to develop an understanding of independent research through the study of a particular Mechatronics Engineering topic of interest. The special project is an exercise in the professional application of specialist skills and experience developed in Mechatronics Engineering program. Research topics, which may be principally experimental, theoretical or applied, will be chosen in consultation with a project supervisor. |
| **Instructor Name:** All Faculty Members | **Office No.:**  | **Office Tel:**  |
| **Indicative Basic Reading List :**  |
| **Topics Covered and Class Schedule:**

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| Week 1-16  | Website update, Report Writing, Fabrication, Assembly and Testing. |

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| **Lecture and Tutorial Learning Outcome** | **Student Outcomes** | **Performed Assessments and Percentage** |
| * Learn how to establish team and team work
* Learning how to deal with a design problem
* making detailed research about certain topics
* Learning the importance of Standards and applications
* Learning the planning stages of design procedure
 | **a, b, c, d, e, f, g, h, i, j, k** | Report, **Demonstration** and Presentation 100% |

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| **Lab. Experiment Title and Lab. Equipment Used** | **Lab Learning Outcome** | **Student Outcomes** | **Performed Assessments and Percentage** |
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**Contribution of Course to Criterion 5**

Credit Hours for:

Mathematics & Basic Science: 0

Engineering Sciences and Design: 3

General Education: 0

**Important Notes:**

University rules and regulations are applied to this course.

**Course Rules and Regulations:**

1. Each Capstone Team group must have maximum 5 and minimum 4 students.
2. The projects must meet most of the Economic, Availability, Environmental, Sustainability, Manufacturability, Ethical, Social, Political, Health and Safety, Constraints etc.
3. The relevant standards (like ASTM, ANSI, ASME, ASHRAE, TS-EN etc.) must be followed during the course of the project and must be referred to in the annexures in the report.
4. **Website** explaining the progress should be regularly updated by the project team on ***weekly basis***. The pictures and videos showing the fabrication and testing should be regularly uploaded on the website.
5. The progress on the manufacturing status should be demonstrated on the website and weekly updated using a ***Gantt Chart***. The progress will be monitored by the supervisor and the coordinator.
6. Draft Report should be submitted to the Supervisor before the ***start of Mid Term Exams***.
7. The following should be submitted to the Supervisor for evaluation **2 weeks** before the ***Start of Final Exams.***i. Final Report, ii. Project (prototype), iii. Presentation with Video of the Prototype Functioning &Testing, iv. Poster / Brochure
8. Each part of the report should be checked by the supervisor for the format, plagiarism and all the necessary requirements before the submission to the coordinator.
9. The following should be submitted to the Coordinator for evaluation **1 week** before the ***Start of Final Exams***.
i. Final Report, ii. Project (prototype), iii. Presentation with Video of the Prototype Functioning &Testing, iv. Poster / Brochure

If the students fail to submit any one of the items above, the project will not be accepted, and the students will get an NG grade.

1. **Deadline for submissions will have *no extensions*.**
2. For the FINAL REPORTS, 1 to 5 days late, a penalty of 10% (of the overall evaluation) per day will be penalized.
3. Students who submit their reports after 5 days will receive a grade of F.
4. A plagiarized report with more than 20% plagiarism will receive a grade of F.
5. The ***last working day before the Exam Week*** will be the ***Open Day*** where all the Projects will be displayed by the respective teams and demonstrated to the faculty and experts from the industry.
6. The ***Demonstration of Prototype*** will be part of the Project Presentation. No project will be graded without the demonstration. Projects without prototype demonstration will receive ***NG grades***.
7. The Project will be the property of the Department.