

University of Puerto Rico Mayagüez Campus College of Engineering Department of Mechanical Engineering Bachelor of Science in Mechanical Engineering



Course Syllabus

1. General Information:
Alpha-numeric codification: INME 4039
Course Title: Mechanical Engineering Practice
Number of credits: 3
Contact Period: Thirty-five hours per week for seven or more weeks during the summer or
its equivalent during the semester.
2. Course Description:
English: A course organized in cooperation with private industry or government to provide the
student with practical experience in mechanical engineering. The work performed by the
student will be jointly supervised by the Academic Department and an appropriate official
from the cooperating organization. An oral and written report will be required from the student
upon completion of the project.
Spanish: Un curso organizado en cooperación con la industria privada o el gobierno para
proveer al estudiante experiencia práctica en proyectos de Ingeniería Mecánica. La labor del
estudiante será supervisada conjuntamente por el Departamento Académico y por un
funcionario apropiado de la entidad cooperadora. Se requerirá del estudiante un informe oral y
escrito al finalizar el proyecto.
3. Pre/Co-requisites and other requirements:
Pre-requisites: Authorization of the Director of the Department
4. Course Objectives:
After successful completion of this class, students will be able to:
Independently and creatively solve complex problems
• An aptitude toward functioning on multidisciplinary teams and recognition of the
contributions by other disciplines to projects
• An awareness of professional ethics and responsibilities as they pertain to a project
• An understanding of the role of their chosen discipline in broader social and global
contexts
5. Instructional Strategies:
Conference discussion computation laboratory
seminar with formal presentation seminar without formal presentation workshop
art workshop Spractice trip thesis special problems tutoring
research other, please specify:
6. Minimum or Required Resources Available:
Materials, equipment, and physical facilities needed to fulfill the course objectives.

7. Course time frame and thematic outline		
General Topics	Contact Hours	
Problem analysis	35	
Problem solution design	70	
Equipment preparation and implementation	70	
Software design and implementation	35	
Technical report	35	
Total hours: (equivalent to contact period)	245	

8. Grading System

Quantifiable (letters) Not Quantifiable

9. Evaluation Strategies

	Quantity	Percent
Exams		
Final Exam		
Short Quizzes		
Oral Reports	1	25
Monographies		
Portfolio		
Projects	1	75
Journals		
Other, specify:		
TOTAL	:	100%

10. Bibliography:

Textbook:

Marks, L.S., Avallone, E.A., & Baumeister, T. (2017). Marks, Standard Handbook for Mechanical Engineers. New York: McGraw-Hill.

11. Law 51: The Comprehensive Educational Services Act for People with Disabilities:

States that after identifying with the instructor and the institution, the student with disabilities will receive reasonable accommodation in their courses and evaluations. For more information, contact the Department of Counseling and Psychological services at the Office of the Dean of Students (Office DE 21) or call 787-265-3864 or 787-832-4040 x 3772, 2040 and 3864.

12. Academic Integrity

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.—

13. Certification 06-43 of the Academic Senate

"The academic guidelines for offering online courses," defines: Traditional face-to-face courses are those that have less than 25% of the course's regular contact hours via the Internet. Therefore,

a three-credit course will be considered "face to face" if, of the 45 hours of regular contact, 11 or less are taught via the Internet. According to certification 06-43 of the Academic Senate, a course may include up to 25% of its total contact hours via the Internet. The objective of this is so that all professors have this alternative in the case of any unscheduled eventuality.

14. Sexual Harassment: Certification 130-2014-2015 states:

Sexual harassment in the workplace and in the study environment is an illegal and discriminatory act and is against the best interests of the University of Puerto Rico. All persons who understand they have been subject to acts of sexual harassment at the University of Puerto Rico may file a complaint and request that the institution investigate, where necessary, and assume the corresponding action by the university authorities. If the complainant is a student, he or she must refer his or her complaint to the Office of the Student Ombudsperson or that of the Dean of Students.

Revised: February, 2019