



Course Syllabus

Course Code	Course Title	ECTS Credits
ENMA-550	Product Development Process	7.5
Prerequisites	Department	Semester
None	Management & MIS	Fall/Spring/Summer
Type of Course	Field	Language of Instruction
Required	Engineering Management	English
Level of Course	Lecturer(s)	Year of Study
2 nd Cycle	Dr. Despo Ktoridou	1 st
Mode of Delivery	Work Placement	Corequisites
Face to Face	N/A	None

Course Objectives:

The main objectives of the course are to:

- Develop an appreciation of the importance of New Product Development (NPD) in industry and in business
- Provide an overview of the NPD process and its success principles
- Provide an understanding of the concepts, tools and best practices used in the industry in relation to NPD
- Develop conceptual, analytical, and decision-making skills related to NPD planning

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Discuss the main principles behind managing the NDP process
2. Discuss the difficulties that maybe encountered in new product adoption
3. Understand the linkages between opportunity identification and idea generation
4. Compare and contrast design trade-off decisions
5. Understand concept testing
6. Describe situations and challenges frequently encountered by NPD managers and develop skills to manage such situations
7. Analyze cases, identify NPD concepts and evaluate their relevance in answering stated questions

8. Work effectively and collaboratively in a product team of students and generate a New Product Development Plan for approval by a guest CEO from the industry.

Course Content:

1. Introduction to course: What is New Product Development and Why is it so important?
2. The New Product Development Process Principles of Success
3. Competition and Product Strategy
4. The Product Life cycle in theory and practice
5. Concept and Idea generation
6. Screening new product ideas
7. Concept development and testing
8. Business analysis
9. Product testing
10. Commercialization
11. Managing Growth

Learning Activities and Teaching Methods:

Power Point and Articulate Presentations; Individual and Group work; Case Study Analysis; Additional Suggested Readings (Scientific papers, journal Articles)

Assessment Methods:

Assignments; Participation/Attendance; Projects; Final Exam

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
New Products Management 11 th , Ed.	Merle Crawford, Anthony DiBenedetto.	Mc Graw Hill	2014	13: 978- 0078029042

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Innovation Management and New Product Development, 6th Ed.	Paul Trott	Pearson	2017	13: 9781292133423
Creating Breakthrough Products: Revealing the Secrets that Drive Global Innovation, 2 nd Ed.	Jonathan Cagan, Craig Vogel	Pearson	2012	9780133011425
Robustness Development and Reliability Growth (paperback): Value Adding Strategies for New Products and Processes	John P. King William S. Jewett	Prentice Hall	2010	9780133807431
International Journal of Product Development	Dr. M.A. Dorgham (Editor in Chief)	Inderscience		