

Polytechnic Institute of Viseu

School of Technology and Management of Viseu

Course title	New Products Design		
Scientific area	Management		
Teaching method	During the course many different teaching methods will be used.		
Lecturers:		Language of instruction	English
ECTS	5	Semester	Fall
Hours per week	1,5	Hours per semester	TP: 19,5; OT: 13
Objectives of the course	<p>It is expected that students are able to:</p> <ul style="list-style-type: none"> • Understanding customer needs, and translating those needs into winning product concepts that have realistic technical specifications • Generate ideas and develop creativity skills • Mapping and implementing the product development process • Competence with a set of tools and methods for product design and development • Ability to coordinate multiple, interdisciplinary tasks in order to achieve a common objective • Reinforcement of specific knowledge from other courses through practice and reflection in an action-oriented setting • Facilitating communication and collaboration within product development teams • Implement 2D/3D or Prototype Product design • Enhanced team working skills 		
Entry requirements	There aren't any.		
Course contents	☒ Introduction ☒ Development Processes and Organizations ☒ Product Planning ☒ Identifying Customer Needs ☒ Product Specifications ☒ Concept Generation ☒ Concept Selection ☒ Concept Testing ☒ Product Architecture ☒ Industrial Design ☒ Design for Manufacturing ☒ Prototyping ☒ Robust Design		
Assessment methods	Project: Central to this class is a team-based approach to conceive and design a new product and present a prototype in the final class session. The goal of this project is to learn principles and methods of product development, to improve teamwork skills and to appreciate the inherent multidisciplinary nature of product development.		
Recommended readings	Ulrich, Karl, and Steven Eppinger. Product Design and Development . 4th ed. New York, NY: McGraw-Hill, 2007. ISBN: 9780073101422.		
Additional information			