

Name	Challenge-Based Innovation	Field of study	-		
Classification	Extracurricular Course/Project	School	Polytechnic Institute of Bragança		
Academic Year	2023/2024	Year of study	-	Level	-
Type	Semestral	Semester	1	Code	9999-940-1006-00-23
Workload (hours)	162	Contact hours	T -	TP -	PL -
			TC -	S -	E -
			OT -	O	60

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Ana Paula Carvalho do Monte, Pedro Miguel Monteiro Rodrigues, Vítor Manuel Barrigão Gonçalves

#### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. To integrate multidisciplinary teams, multicultural and transnational, and all students contribute for the final work
2. Work as a team, demonstrating knowledge, skills and interpersonal relationships
3. Develop a teamwork plan that answers to the challenges or problems of the IPB community or partner organizations
4. Develop innovative and creative solutions to the problems and challenges launched, with a value proposition for the end user
5. Execute the work plan, following the fundamental steps, adapting it to the proposed objectives and responding in an effective way to the challenges and problems launched
6. Demonstrate communication skills, presenting in a clear, informed and sustainable way the ideas and solutions developed

#### Prerequisites

Not applicable

#### Course contents

Develop a collaborative work that will implement an innovative solution for a given challenge

#### Course contents (extended version)

1. Analysis and study of the selected challenge
2. Teamwork
3. Discussion of ideas (brainstorming)
4. Rapid prototyping (if applicable)
5. Innovation
6. The value proposition for different stakeholders
7. Solution validation
8. Creation of value proposition for the end user

#### Recommended reading

Artigos científicos e obras de referência onde se inserem os desafios propostos. / Scientific papers and reference works where the proposed challenges are inserted.

#### Teaching and learning methods

The students will work in teams with 4 to 6 elements, with orientation. Practical learning strategies will be used, using collaborative work, with access to researchers, teachers and specialists. Discussions and workshops on content will be promoted, allowing students to develop the necessary skills.

#### Assessment methods

- Projects - 100% - (Regular, Student Worker) (Final, Supplementary, Special)

#### Language of instruction

1. Portuguese
2. English

#### Electronic validation

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29-10-2023	29-10-2023