Guideline to evaluate the presentation carried out in the Module 2. Design thinking: Creative engineering methods

The first thing to do is to choose the challenge in which to apply design thinking principles to solve real-world problems.

The teaching staff should come up with a small project related to the engineering in which the module is being implemented, appropriate to the academic level of the students and the schedule of the module.

Students should solve the challenge and create a portfolio to document their design thinking process.

After the portfolio is released, students must present their solutions and explain their design process, allowing for evaluation of their ability to empathize, define problems, ideate, prototype, and iterate.

In order to evaluate the presentation, it will be checked that the following guidelines and requirements are met:

- Specific, basic and transversal competencies are developed and demonstrated on the portfolio:
    - Ability to design, write and direct projects, in all their diversity and phases.
    - Ability to use modern and creative techniques, skills and tools for engineering practice.
    - Effective oral and written communication skills with ethics and social responsibility as a citizen and as a professional.
    - Apply critical, logical and creative thinking to question reality, seek and propose innovative solutions at a formal, functional and technical level.
    - Organization and planning capacity.
    - Capacity for analysis and synthesis.
    - Express yourself correctly, both orally and in writing, in the official languages.
    - Use the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for learning throughout the life.
    - Develop for the exercise of citizenship that respects democratic culture, human rights and the gender perspective.
- Creative methods have been applied to the case study to propose multiple creative solutions and detailed in the presentation.
- All the design phases have been completed and properly explained.
- A clear and organised graphical summary showing the whole process is presented.
- Focus on the process: This allows them to assess their ability to iterate, reflect, and communicate their design thinking journey.
- The graphic design content is developed to accompany the presentation, and it is coherent throughout the document as well as the quality of the document has been worked on.

Rubric for portfolio assessment					
Item	**Does not comply (0 points)**	**Insufficiently comply (0.25 points)**	**Sufficiently complies (0.5 points)**	**Complies very well (0.75 points)**	**Complies excellently (1 points)**	**Marks (0-1)**
Selection of a methodology or process to follow.	No methodology has been selected.	A methodology has been selected but the process is not followed correctly.	A methodology has been selected and the process is followed correctly.	The best methodology has been selected for the problem at hand and the process is followed correctly.	The best methodology has been selected for the problem at hand and the process is followed excellently.	0-1
Design phases.	Design phases have not been carried out.	Design phases have been completed.	Design phases have been completed and explained.	All the design phases have been completed and properly explained.	All the design phases have been completed and excellently explained.	0-1
Creative methods.	No creative methods have been used or explained.	Creative methods have been selected (at least 1) and applied to the case study to propose some solution and are detailed in the presentation.	Creative methods have been selected (at least 1) and applied to the case study to propose multiple creative solutions and are detailed in the presentation.	Creative methods have been selected (at least 2) and applied to the case study to propose multiple creative solutions and are detailed in the presentation.	Creative methods have been selected (at least 3) and applied to the case study to propose multiple creative solutions and are detailed in the presentation.	0-1
A review, evaluation and selection of the proposed solution.	No solution proposed.	The proposed solution does not fit the problem.	Possible solutions are proposed.	A review and evaluation of the possible solutions has been carried out, but the selected one is not the best.	A review and evaluation of the possible solutions has been carried out and the best one has been chosen, explaining the criteria.	0-1
Summary.	Summary has not been carried out.	A summary showing the process is presented.	An organised summary showing the whole process is presented.	A clear and organised summary showing the whole process is presented.	A clear and organised graphical summary showing the whole process is presented.	0-1
Focus on the process.	The process is not showed.	The design process is barely showed.	The design process is showed.	The design process is showed, including sketches, ideation	The design process is showed, including sketches, ideation	0-1

				notes, prototypes, and reflections.	notes, prototypes, and reflections. This allows them to assess their ability to iterate, reflect, and communicate their design thinking journey.	
Presentation (documenting the design thinking process).	Presentation has not been carried out.	A presentation has been carried out.	A presentation documenting the solution has been carried out.	A presentation documenting the design thinking process and the solution has been carried out.	An excellent presentation documenting the design thinking process and the solution has been carried out.	0-1
Communication skills.	They do not communicate the right concepts, and the audience does not understand them.	They do not communicate the right concepts, but the audience understands them.	They express correctly, both orally and in writing, in the official languages. Effective oral and written communication skills.	They express properly, both orally and in writing, in the official languages. Effective oral and written communication skills.	They express excellently, both orally and in writing, in the official languages. Effective oral and written communication skills with ethics and social responsibility as a citizen and as a professional.	0-1
ICT.	No use the basic tools of information and communication technologies (ICT).	Barely use the basic tools of information and communication technologies (ICT).	Use the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for	Competent in the use of the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for	Proficiency in the use of the basic tools of information and communication technologies (ICT) necessary for the exercise of the profession and for	0-1

			learning throughout the life.	learning throughout the life.	learning throughout the life.	
Graphic design, coherence and quality.	There is no graphic design or coherence, and there is a lack of quality.	The graphic design is not coherent throughout the document and there is a lack of quality.	The graphic design is coherent throughout the document and there is an acceptable quality.	The graphic design content is developed to accompany the presentation, and it is coherent throughout the document as well as the quality of the document has been worked on.	The graphic design content is developed to accompany the presentation, and it is coherent throughout the document as well as the quality of the document has excellently been worked on.	0-1
Total mark						0-10