The CREATIVE Lab is an ESEIAAT Idea Lab, where students work collaboratively with the teachers and the VolksWagen engineers on joint projects proposed by the company.

Specific objectives:
- Work in coworking with multidisciplinary teams in collaboration with the company
- Generate innovative and creative ideas in the environment of the proposed project
- Develop the chosen idea
- Evaluate the technical and economic feasibility of the idea.
- Develop prototype (if possible)
- Present and defend the chosen idea (in English)
## Study load

<table>
<thead>
<tr>
<th>Study load</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total learning time:</td>
<td>150h</td>
<td></td>
</tr>
<tr>
<td>Hours large group:</td>
<td>30h</td>
<td>20.00%</td>
</tr>
<tr>
<td>Hours medium group:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td>Hours small group:</td>
<td>30h</td>
<td>20.00%</td>
</tr>
<tr>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
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### Module 1. Basic Concepts

**Description:**
- Information search
- Project methodology
- Initial meeting

**Related activities:**
- Seminar on Project Methodology
- Information Research Seminar
- Initial meeting

**Specific objectives:**
- The student must be able to:
  - Know the main types of primary and secondary documents, scientific and technical standards.
  - Learn to search and consult information sources: search engines, catalogs, databases, the Internet.
  - Select information efficiently through management programs.
  - Identify the structure of technical and scientific work.
  - Manage the acquisition, structuring, analysis and visualization of data and information in the field of specialty.
  - Critically evaluate the results of this management.
  - Identify yourself in the project from the initial state as a member of a group.
  - Meet the tutors of the company and establish a first contact.

### Module 2. Ideas generation

**Description:**
- Generation and definition of ideas
- Product presentation
- Meeting. Presentation ideas

**Related activities:**
- Seminar on Creative Thought
- Seminar on product presentation
- Meeting. Presentation of ideas

**Specific objectives:**
- The student must be able to:
  - Apply techniques to enhance creativity.
  - Apply creative thinking techniques to different situations.
  - Identify and apply the stages of the creative process.
  - Generate the battery of innovative and creative ideas for each project.
  - Contextualize the detected problems and present the suggested solutions.
  - Make and defend the summary poster in which the suggested ideas are schematically presented.
Module 3. Ideas Development

**Learning time:** 45h
Theory classes: 9h
Laboratory classes: 9h
Self study : 27h

**Description:**
The development of the ideas selected at the first meeting will be carried out. Tutors will help students define strategies and solve doubts about both the approach and the solutions.
Technology seminars by research groups. The technical feasibility of the idea will be evaluated.

**Related activities:**
Meeting. Development phase

**Specific objectives:**
The student must be able to:
- Present the development of the ideas selected at the first meeting.
- Contextualize the detected problems and present the suggested solutions.
- Defend the summary poster in which the suggested ideas are schematically presented.

Module 4. Final Presentation

**Learning time:** 30h
Theory classes: 6h
Laboratory classes: 6h
Self study : 18h

**Description:**
The groups will need to prepare the report explaining the development and viability of the project. A poster, presentation and promotional video will also be requested.
There will be a meeting with all the participants of the CREATIVE Lab (students, teachers and company tutors). Students must present the final result of their project development. They will have to contextualize the detected problems and present the applied solutions. In the discussion phase, each group must defend a summary poster in which the final result is schematically presented.

**Related activities:**
Final meeting

**Specific objectives:**
The student must be able to:
- Present the final result of the development of your project (memory, presentation, poster and video)
- Contextualize the detected problems and present the solutions applied.
- Defend the summary poster in which the final result is schematically presented.

Bibliography