340086 - MAPR-D3O17 - Layout and Prototyping

Learning objectives of the subject

1. Implement general habits and prevention of risks in specific areas of work with machines and tools.
   1.1. Knowledge of safety issues in the workplace.
   1.2. Knowledge of safety issues to consider specific processes during the semester: Fillers, laser cutting, cutting and other mechanical wear.
   1.3. Knowledge on how to act in case of accident.
2. Understand the model and prototype design as fundamental in the process of developing a product.
   2.1. Knowing the difference between a demo, a prototype and a short series of products.
   2.2. Get technology manufacturing models and prototypes.
   2.3. Know the materials, finished and their compatibility.
3. Learn the techniques of rapid prototyping.
   3.1. The digital laboratory and manufacturing machinery.
   3.2. Cutting boards: cutting blades, laser cutting, water jet cutter, CNC lathe and plasma.
   3.3. 3D Printing: Filament, liquid, powder
   3.4. 3D Scanning

Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 45h</th>
<th>30.00%</th>
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<tr>
<td></td>
<td>Hours medium group: 0h</td>
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<td>Hours small group: 15h</td>
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<td>Guided activities: 0h</td>
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<td>Self study: 90h</td>
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Bibliography

Basic:


Complementary:
