240IQU21 - Polymers

Degree competences to which the subject contributes

Specific:
CEQUIM1. Apply knowledge of mathematics, physics, chemistry, biology and other natural sciences, achieved by the study, experience and practice, with a critical reasoning in order to establish economically viable solutions.
CEQUIM6. Have the systematic and comparative knowledge of the plastic materials and its transformation processes which trains for the selection of material and the procedures for the application which has been proposed.

Learning objectives of the subject

1. To acquire basic knowledge of the chemical structure of the polymers used in industry, their manufacturing, their classification and their nomenclature.
2. To acquire basic knowledge about the properties of polymers and how they relate to the chemical and physical structure.
3. To acquire a basic understanding of the processes of transformation of the polymers and of properties and applications of the major industrial and advanced polymeric materials.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 112h 30m</th>
<th>Hours large group:</th>
<th>0h</th>
<th>0.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>27h</td>
<td>24.00%</td>
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<td></td>
<td>Hours small group:</td>
<td>13h 30m</td>
<td>12.00%</td>
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<tr>
<td></td>
<td>Guided activities:</td>
<td>0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Self study:</td>
<td>72h</td>
<td>64.00%</td>
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</tbody>
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# Content

## 1. Polymer Chemistry

**Learning time:** 13h 30m  
Practical classes: 9h  
Laboratory classes: 4h 30m

**Description:**  

## 2. Structure and properties

**Learning time:** 13h 30m  
Practical classes: 9h  
Laboratory classes: 4h 30m

**Description:**  

## 3. Polymer technology

**Learning time:** 13h 30m  
Practical classes: 9h  
Laboratory classes: 4h 30m

**Description:**  

## Bibliography

**Basic:**