Understanding the processes of construction and repair of ships, structural concepts, types of inspections and certificates of ships, classification societies, ship recognition methods and main breakdowns.

**Learning objectives of the subject**

Understanding the processes of construction and repair of ships, structural concepts, types of inspections and certificates of ships, classification societies, ship recognition methods and main breakdowns.

**Study load**

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 30h 20.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 15h 10.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group: 10h 6.67%</td>
</tr>
<tr>
<td></td>
<td>Guided activities: 5h 3.33%</td>
</tr>
<tr>
<td></td>
<td>Self study: 90h 60.00%</td>
</tr>
</tbody>
</table>
# 280696 - Inspection, Maintenance and Repair of Ship Structures

## Content

### Construction and repair of ships and boats. Structural concepts.

**Description:**
Shipbuilding: Process shipbuilding, steel and other construction materials, painting and finishing, and testing equipment.
Ship Repair: Processes and practices of ship repair steel, planning, and execution of technical repair common types of repair work.
Ship breaking up.

**Learning time:** 15h  
**Theory classes:** 15h

### Recognition and Certification of ships

**Description:**

**Specific objectives:**
The procedures for inspection and certification of merchant vessels and pleasure and abroad. Knowing the certificates to be carried on board ships.

**Learning time:** 15h  
**Theory classes:** 15h

### Classification Societies

**Description:**
- Operation  
- Goals  
- Structure  
- IACS - International Association of Classification Societies  
- CSR - Common Structural Rules.

**Learning time:** 10h  
**Theory classes:** 10h

### Recognition methods of the ship

**Description:**
Means to assess the condition of the vessel: visual inspection, non-destructive testing methods, pressure testing and sealing testing, performance testing, stability, toma thickness, vibration measuring tools and equipment. Inspection programs: Recognition periodic renewal class distinctions in drydock.

**Learning time:** 10h  
**Theory classes:** 10h
Failures

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes of failures, considerations to take into account. Fatigue, corrosion under tension, the progress of corrosion, humidity and heat stress concentration factor.</td>
</tr>
</tbody>
</table>

Learning time: 10h
Theory classes: 10h

Planning of activities

<table>
<thead>
<tr>
<th>name english</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting to MB’92 shipyard.</td>
</tr>
</tbody>
</table>

Hours: 2h
Theory classes: 2h

Qualification system

30% - FINAL PROJECT.
30% - PARTIAL EXAM.
40% - FINAL EXAM.

The test will be held on reevaluation and time specified by the Faculty. Consist of a single test may be submitted only the students who meet the requirements set out in the undergraduate academic regulations of the FNB.

Regulations for carrying out activities

Assessment tests will contain theoretical tests, practical and/or problem solving.

Considered absent does not involve any of the tests evaluated.

The test will be held on reassessment and time specified by the Faculty. Consist of only a single test Prodi presented the students who meet the requirements set out in the undergraduate academic regulations of the FNB.
Bibliography

Basic:


Others resources: