Course guide
280630 - 280630 - Work Placement

Unit in charge: Barcelona School of Nautical Studies
Teaching unit: 742 - CEN - Department of Nautical Sciences and Engineering.
Degree: BACHELOR'S DEGREE IN NAUTICAL SCIENCE AND MARITIME TRANSPORT (Syllabus 2010). (Optional subject).

Academic year: 2022  ECTS Credits: 30.0  Languages: Catalan

LECTURER

Coordinating lecturer: AGUSTIN MARTIN MALLOFRE - JOSEP ALBERT RIBET GÓMEZ

Primer quadrimestre:
AGUSTIN MARTIN MALLOFRE - Grup: GNTM

Segon quadrimestre:
JOSEP ALBERT RIBET GÓMEZ - Grup: GNTM

Others:
Primer quadrimestre:
AGUSTIN MARTIN MALLOFRE - Grup: GNTM
JOSEP ALBERT RIBET GÓMEZ - Grup: GNTM

Segon quadrimestre:
JOSEP ALBERT RIBET GÓMEZ - Grup: GNTM

PRIOR SKILLS

Boat practices:

In case of doing part or all of the practices on board a boat, you will have to pass the physical fitness medical examination.

Medical recognition of physical fitness:
When the time comes to enroll as a crew member on a merchant ship to perform the practices, the student will have to pass a medical examination in which their ability to embark will be assessed. (O.M. of the Presidency of March 1, 1973. BOE No. 56 of March 6, R.D. 1696/2007 of December 14, 2007).

These medical examinations will be carried out in the maritime health centers of the Social Marine Institute, governed by the provisions of the R.D. 1696/2007 of December 14, 2007.

In the event that a student is considered unfit in this medical examination, he / she will have the possibility of doing the internships in a company on the ground, so that he / she can obtain the corresponding academic qualification. These practices will be carried out through UPC-Company agreements. The equivalence of credits for business practices is the same as that established for boat practices.
REQUIREMENTS

Registration of external internships may be formalized when only pending to exceed a maximum of 4 subjects (excluding the subject) in compulsory boat practices in addition to the limits of credits provided for automatic compensation authorized to each degree degree.

Boat practices:

To be able to carry out the practices. The student will need the Student Certificate. They can request the Student Certificate (including the training book), all students who have enrolled at least 180 ECTS credits and have passed 80% of these credits (in total, you must have overcome 144 credits). In addition, they must be in possession of the basic training certificate.

In order to embark, the student will also need the following documentation:

A) Maritime Notebook
B) On-board Training Book for Machine and Nautical Students
C) Medical recognition
D) School insurance

Business practice:

Internships in companies must be carried out through UPC-EMPRESA educational cooperation agreements and in companies related to the naval / maritime sector and according to the competences of the studies being studied.

To carry out the UPC-EMPRESA curricular internship, it is necessary for the student to meet the criteria for enrolling in the company internship course. That is, they are pending to pass a maximum of 4 subjects (excluding the subject of external internships) compulsory in addition to the limits of credits provided for automatic compensation authorized to each degree degree.

To carry out the UPC-EMPRESA curricular internship, it is necessary for the student to meet the criteria for enrolling in the company internship course. That is, they must remain pending a maximum of 4 subjects (excluding the subject of external internships), in addition to the limits of the credits provided for authorized automatic compensation for each degree.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

General:
2. Capacitat PER CONCEBRE, I MANAGE TO IMPLEMENT SISTEMES Complexos L’ambit de L’ENGinyeria Nàutica I Transport Marítim
3. ABILITY TO IDENTIFY AND SOLVE PROBLEMS IN THE FIELD OF ENGINEERING

Transversal:
1. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
4. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.
TEACHING METHODOLOGY

The external academic practices constitute an activity of a formative nature carried out by the university students and supervised and evaluated by the universities. The purpose of these is to allow the student to apply and complement the knowledge acquired in their academic training and, thus, favor the acquisition of skills that prepare them for the exercise of professional activities, facilitate their employability and promote their ability to enterprising.

The FNB will appoint a tutor, from among the teaching staff assigned to the center, who will perform the tasks of academic tutoring and assessment for the students who are doing internships in the company.

The equivalence of credits for external internships will be 1 ECT credit = 30 hours of work. Therefore, the duration of external internships, both in boat and company, will be at least 4 months.

The regulations associated with external internships can be consulted on the web:
http://www.fnb.upc.edu/sites/default/files Normative%20Practiques%20externes%20GRAUS.pdf

Boat practices:

The vessels in which the academic practices can be carried out are:

On board civilian vessels, on board school vessels designated by the DGMM and on board other types of vessels determined by the FNB.

nautical:

a) Spanish ships:
Lists: 1st and 2nd: all
3rd and 5th: over 100 GRT
6th and 7th: over 75 GRT
8th: over 20 GRT

b) Foreign vessels with characteristics similar to those indicated in the previous section
The practices for the obtaining of the professional titles (Pilot of Second of the Merchant Navy or Officer of Second Machines of the Merchant Navy) are regulated in the following regulations:

1. Order of June 21, 2001 on professional cards of the Merchant Navy
2. Royal Decree 973/2009 of June 12, which regulates the professional qualifications of the merchant marine.

Business practice:

At the time of formalizing the university-business cooperation agreement, the student must communicate to academic management if it is desired that the practices carried out correspond to curricular practices, so that it can be verified that the established requirements are met.

In no case the tasks of administrative support and teaching support can be considered external practices.
LEARNING OBJECTIVES OF THE SUBJECT

LEARNING OBJECTIVES OF THE SUBJECT:
Design and execute a good advanced search strategy with specialized information resources. Identify the relevance and quality of the information.
Identifies and models complex systems. Carry out qualitative analyzes and approaches, establishing the uncertainty of the results. Prepare hypotheses and experimental methods to validate them. Identify key components and establish commitments and priorities. Carry out the tasks based on the basic orientations given by the teaching staff, deciding the time and resources necessary to reach them. Evaluate the strengths and weaknesses themselves, acting accordingly. Identifies user needs and develops a product-process-service definition, as well as initial specifications. Follow a design process management model based on a standard. Evaluate the application of applicable legislation and regulations. Identify the needs and opportunities of the market. It collects information that allows to elaborate the specifications of a new product, process or service. Develop a basic business plan. Carry out the planning and execution of a design process. Acquire professional experience and a better understanding of the structure, organization, operation and activity of a corporate organization in the maritime sector and its surroundings.
Obtain new knowledge in the specific field in which the training activity is carried out.
Exercise generic and specific skills in a real work environment. Design and execute a good advanced search strategy with specialized information resources. Identify the relevance and quality of the information.
Identifies and models complex systems. Carry out qualitative analyzes and approaches, establishing the uncertainty of the results. Prepare hypotheses and experimental methods to validate them. Identify key components and establish commitments and priorities. Carry out the tasks based on the basic orientations given by the teaching staff, deciding the time and resources necessary to reach them. Evaluate the strengths and weaknesses themselves, acting accordingly. Identifies user needs and develops a product-process-service definition, as well as initial specifications. Follow a design process management model based on a standard. Evaluate the application of applicable legislation and regulations. Identify the needs and opportunities of the market. It collects information that allows to elaborate the specifications of a new product, process or service. Develop a basic business plan. Carry out the planning and execution of a design process. Acquire professional experience and a better understanding of the structure, organization, operation and activity of a corporate organization in the maritime sector and its surroundings.
Obtain new knowledge in the specific field in which the training activity is carried out.
Exercise generic and specific competencies in a real work environment.

COMPETENCES OF THE SUBJECT:

general:

CG6. SOLVENT USE OF INFORMATION RESOURCES. Manage the acquisition, structuring, analysis and visualization of data and information in the field of specialization and critically evaluate the results of this management.

CG7. LEADERSHIP LEARNING Detect gaps in one's own knowledge and overcome them through critical reflection and the choice of the best action to expand this knowledge.

CG8. Ability to identify and SOLVENT PROBLEMS IN THE FIELD OF Nautical Engineering and Maritime Transport. (Additional competence of the Faculty of Nautic of Barcelona) Capacity for the approach and resolution of problems in the field of Nautical and Maritime Transport assuming initiatives, making decisions and applying creative solutions, within the framework of a systematic methodology.

CG9. Ability to conceive, DESIGN AND IMPLEMENT COMPLETE SYSTEMS IN THE FIELD OF NAUTICAL AND MARITIME TRANSPORTATION (Additional competence of the Faculty of Nautical of Barcelona) Capacity for the design, design and implementation of processes, systems and / or services within the scope of the Nautical and Maritime Transport, including the drafting and development of projects in the field of specialization, knowledge of basic materials and technologies, decision making, management of the activities that are the object of the projects, the realization of measurements, calculations and valuations, the management of specifications, regulations and standards of compulsory compliance, the assessment of the social and environmental impact of the technical solutions adopted, the economic valuation and of material and human resources involved in the project, with a systematic and integrative vision.
STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours small group</td>
<td>10,0</td>
<td>1.11</td>
</tr>
<tr>
<td>Self study</td>
<td>810,0</td>
<td>90.00</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>10,0</td>
<td>1.11</td>
</tr>
<tr>
<td>Guided activities</td>
<td>70,0</td>
<td>7.78</td>
</tr>
</tbody>
</table>

Total learning time: 900 h

CONTENTS

**Description:**
Maneuvering of ships, astronomical observations, coastal navigation, correction of documentation (navigation cards, defeats etc.), Controls of loading and unloading operations, familiarization with manifest crew, crew lists, B / L, etc.)

**Specific objectives:**
It acquires professional experience and a better understanding of the structure, organization, operation and activity of a business organization in the maritime sector and its environment. Obtain new knowledge in the specific field in which the training activity is carried out. Exercise generic and specific competencies in a real work environment.

**Related activities:**
Those specified in sections 1, 2, 3, 4 of the STCW and in addition to the tasks of Sections 5 and 6 if they have embarked on a tanker, gas or chemical tanker, of the record book of the student of the bridge student.

**Full-or-part-time:** 1h
Theory classes: 1h

GRADING SYSTEM

The evaluation system consists of a joint test consisting of two exercises that the student must complete once the practices have been completed.

The first exercise consists of presenting a work / report, with an extension between 40 and 50 pages, including:

**NAUTICAL:**
1. Main characteristics and description of the spaces of the ship and covers.
   (In addition to recording the boat information, use plans to write down the names of the spaces)
2. Organization chart on board and functions of the crew.
   (You must make an organization chart with the entire crew, along with you and then collect the tasks that each one of them develops on board the ship)
3. Explanation of the daily tasks performed by the student in the docking maneuver and departure, during navigation, in the periodic exercises and loading.
   (At this point you have to explain in detail your tasks in the different situations mentioned above, if it is the case that, due to the
characteristics of the ship, some situation can not be fulfilled, such as loading on a passenger ship, can be replaced by another related to the type of boat, such as control of passengers on a cruise.

4. Equipment operation.

(In this section you must explain step by step how the processes that request the following points are carried out, attaching screenshots or schematic drawings)

5.1 Explain in detail the setting of the clutter and the rain on the radar.
5.2 Explain in detail how a travel or route plan is created.
5.3 Explain in detail how to adjust the autopilot to follow a route.

5. List of problems raised and the procedure for its resolution.

(He must explain the problems that may have arisen during his stay on board the ship and also detail its resolution).

6. Evaluation of practices and suggestions for improvement.

(At this point the student must make an assessment of their practices, contributing the positive points, the negative points and what things they have detected that should be changed for a better functioning of the boat, or the management of the practices).

7. Preparation of plans (Annexes).

(The student must make a hand-drawn map of each point, according to DIN A4, DO NOT USE WITH COMPUTER, drawing and writing down the name of all the elements of the site with English and Spanish or Catalan).

7.1 Government bridge.
7.2 Maneuver to bow.
7.3 Maneuver aft.
7.4 Engine room.

BUSINESS:

In the case of external internships in the company, the contents of the work should describe the company in which the practices and tasks carried out in it have been carried out. We will have to talk with the tutor of practices to define some other content, more specific, that it is necessary to include in the memory. The extension of the work should also be between 40 and 50 pages.

Minimum contents:

a) Personal data of the student.
b) Collaborating entity where you have performed the internship and place of placement.
c) Concrete and detailed description of the tasks, work carried out and departments of the entity to which you have been assigned.
d) Assessment of the tasks carried out with the knowledge and competencies acquired in relation to university studies.
e) Relationship of the problems raised and the procedure followed for their resolution.
f) Identification of the contributions that, in the matter of learning, have supposed the practices.
g) Evaluation of improvement practices and suggestions.

The second exercise consists of the oral description of the report presented and the tasks performed during the internships, both on board and in companies. This presentation should not last more than 15 or 20 minutes. After the presentation, the internship tutor will ask some questions that allow a better evaluation of the student.

The final note of practices will be computed as the average of the first and second year.

\[ N_{\text{final}} = 12:50 \cdot N_{E1} + 12:50 \cdot N_{E2} \]
Students who choose to do external internships in companies in the maritime port sector, these will not appear in the mention associated with the European degree of graduate.

The subject of external internships is not susceptible to be compensated.

EVALUATION CRITERIA:

Students have a rubric to prepare the exhibition and prepare the work. These clearly specify how each of the 10 points of the evaluation of the written work or memory and of the 10 points of the evaluation of the exhibition is valued.

EXAMINATION RULES.

In order to be able to evaluate external boat practices, the student or student must provide the duly completed training book, a photocopy of the boarding pass where there is a minimum of 4 months on board as a bridge student, a photocopy of the tasks carried out and signed by the officers of the ship and photocopy of annex 4 certifying the shipment of 4 months.

The students who carry out the practices in company will have to take a letter of the same where they specify the tasks carried out (Annex 4) with the numerical valuations and a certified copy by academic management of the agreement University-company under which they are realized the practices.