



## IDENTIFYING DATA

### Master's Degree Thesis

|                     |  |           |      |            |
|---------------------|--|-----------|------|------------|
| Subject             | Master's Degree Thesis   |           |      |            |
| Code                | V04M141V01402  |           |      |            |
| Study programme     | (*)Máster Universitario en Enxeñaría Industrial  |           |      |            |
| Descriptors         | ECTS Credits   | Choose    | Year | Quadmester |
|                     | 24   | Mandatory | 2nd  | 2nd        |
| Teaching language   |  |           |      |            |
| Department          | Systems Engineering and Automatismos<br>Business Organisation and Marketing  |           |      |            |
| Coordinator         | Pardo Froján, Juan Enrique   |           |      |            |
| Lecturers           | Fernández Silva, Celso<br>Pardo Froján, Juan Enrique   |           |      |            |
| E-mail              | jpardo@uvigo.es  |           |      |            |
| Web                 |  |           |      |            |
| General description | Realisation, presentation and defence, once obtained all the credits of the plan of studies, of an original exercise realised individually in front of a university court, consistent in an integral project of Industrial Engineering of professional nature in which *sinteticen the competitions purchased in the educations. |           |      |            |

## Competencies

|      |  |
|------|--|
| Code |  |
| C35  | CTFM1. Execution, presentation and defense, once obtained all the credits of the curriculum, from an original exercise done individually before a university tribunal, consisting of a comprehensive project of Industrial Engineering of professional nature in which the skills acquired in the lessons are synthesized. |
| D1   | ABET-a. An ability to apply knowledge of mathematics, science, and engineering.  |
| D2   | ABET-b. An ability to design and conduct experiments, as well as to analyze and interpret data.  |
| D3   | ABET-c. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.   |
| D5   | ABET-e. An ability to identify, formulate, and solve engineering problems.   |
| D7   | ABET-g. An ability to communicate effectively.   |

## Learning outcomes

| Expected results from this subject  | Training and Learning Results |                            |
|---|-------------------------------|----------------------------|
| Put in practice of the knowledges purchased in the development of a subject applied specific  | C35                           | D1<br>D2<br>D3<br>D5<br>D7 |
| Realisation of an integral project of Industrial Engineering of professional nature in which summarize the competences purchased in the educations. | C35                           | D1<br>D2<br>D3<br>D5<br>D7 |

## Contents

|       |
|-------|
| Topic |
|-------|

- (\*)· Objetivos del trabajo
- Antecedentes y bases de partida
- Desarrollo
- Conclusiones
- Pliego de condiciones
- Presupuesto
- Plano

### Planning

|                        | Class hours | Hours outside the classroom | Total hours |
|------------------------|-------------|-----------------------------|-------------|
| Supervised work        | 25          | 75                          | 100         |
| Problem solving        | 20          | 30                          | 50          |
| Project based learning | 0           | 200                         | 200         |
| Previous studies       | 0           | 125                         | 125         |
| Case studies           | 0           | 75                          | 75          |
| Laboratory practice    | 0           | 50                          | 50          |

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

### Methodologies

|                        | Description  |
|------------------------|--|
| Supervised work        | Documentation on the state of the art of the subject object of the TFM |
| Problem solving        | Approach of the problem to tackle                                      |
| Project based learning | Composition of the memory and of the executive summary                 |
| Previous studies       | Development and implantation of the solution chosen                    |
| Case studies           | Analysis of solutions  |

### Personalized attention

#### Methodologies Description

|                 |   |
|-----------------|---|
| Supervised work | The professor will attend personally the doubts and queries of the students. They will attend doubts so much of theoretical character like practical. |
| Problem solving | The professor will attend personally the doubts and queries of the students.  |

### Assessment

| Description   | Qualification | Training and Learning Results |                            |
|---|---------------|-------------------------------|----------------------------|
| Supervised work(*)El alumno deberá realizar una memoria del trabajo y una exposición pública del mismo. | 100           | C35                           | D1<br>D2<br>D3<br>D5<br>D7 |

### Other comments on the Evaluation

#### Sources of information

#### Basic Bibliography

#### Complementary Bibliography

### Recommendations

#### Other comments

Development, presentation and defence, once obtained all the credits of the plan of studies, of an original exercise realised individually in front of a university court, consist in an integral project of Industrial Engineering of professional nature in which summarise the competences purchased in the educations.