

**COURSE DATA****Data Subject**

<b>Code</b>	44662
<b>Name</b>	External internships
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	10.0
<b>Academic year</b>	2023 - 2024

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
2221 - Master's Degree in Data Science	School of Engineering	2	Annual

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2221 - Master's Degree in Data Science	14 - External internships	External Practice

**Coordination**

<b>Name</b>	<b>Department</b>
SORIA OLIVAS, EMILIO	242 - Electronic Engineering

**SUMMARY**

The Master's Thesis (TFM) is a compulsory subject that students must carry out to obtain the master's degree, once obtained all the credits of the master curriculum. It should consist of conducting a comprehensive project in the area of chemical engineering (technical, professional or research). It must be publically presented and defended individually and assessed for university tribunal. The main objective of TFM is that the student synthesizes the content and skills that have been acquired previously in its studies. . Always it will be developed under the supervision of a tutor to guide students in their development. The organization, application, development, mentoring, presentation, defense, assessment and administrative management of TFM is governed by the established regulations in the University, Faculty and Master.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 2221 - Master's Degree in Data Science

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Be able to assess the need to complete their technical, scientific, language, computer, literary, ethical, social and human education, and to organise their own learning with a high degree of autonomy.
- Be able to defend criteria with rigor and arguments and to present them properly and accurately.
- Capacidad de análisis y síntesis, en la elaboración de informes, en la exposición, comunicación y defensa de ideas.
- Capacidad de organización y planificación de actividades de investigación, desarrollo y consultoría en el área de ciencia de datos.
- Ability to autonomously make decisions and to properly and originally elaborate reasoned arguments, in order to obtain reasonable and contrastable hypotheses.
- Ser capaces de asumir la responsabilidad de su propio desarrollo profesional y de su especialización en uno o más campos de estudio, aplicando los conocimientos adquiridos en la identificación de salidas profesionales y yacimientos de empleo.
- Extraer conocimiento de conjuntos de datos en diferentes formatos.
- Capacidad para visualizar de forma óptima conjuntos de datos para la extracción de conocimiento.
- Modelar la dependencia entre una variable respuesta y varias variables explicativas, en conjuntos de datos complejos, mediante técnicas de aprendizaje máquina, interpretando los resultados obtenidos.
- Saber realizar las labores propias de su profesión incluyendo, entre otras, la adquisición y clasificación de datos de forma eficiente, aplicación de las técnicas de análisis de datos avanzado para llegar a la extracción de información (científica, de mercado, etc.) a partir de los mismos.

**LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)**

Know how to apply the knowledge and skills acquired in a professional environment. Being able to integrate into a work environment. Learn to work with other data scientists on a common problem.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Internship		100
Study and independent work	30,00	0
Internship	120,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

Work carried out in companies or research centers and developed on facilities, processes, systems and / or industrial services related to the professional activity of data scientist. These tasks are carried out under the supervision of a tutor in the company, and subsequently be an academic tutor, if it's necessary (tutorials).

The student will perform a stay on the premises of the company or center, and he/she will integrate into the designated work place.

One memory work developed, where the results will be presented will be developed. This activity does not have to be carried out in the workplace.

**EVALUATION**

Report on the student of the tutor of the company or institution where external practices are developed. This report will be based on the most relevant aspects related to the degree of compliance with the practice, training aspects and the skills acquired by the student.

In case of doubt about the report made by the tutor, the information contained in a report that the student must present about the activities carried out in the company will be used.