COURSE DATA

Data Subject	
Code	36448
Name	Degree final project
Cycle	Grade
ECTS Credits	12.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1406 - Degree in Data Science	School of Engineering	4	Second term

Subject-matter

Degree	Subject-matter	Character
1406 - Degree in Data Science	15 - Degree final project	End Labour Studies

Coordination

Name	Department
SERRANO LOPEZ, ANTONIO JOSE	242 - Electronic Engineering

SUMMARY

The Final Degree Project (TFG) is compulsory and has 12 ECTS credits that represent an average student activity of 300 hours. It will be carried out at the end of the Bachelor's Degree, once the rest of the subjects have been passed.

The Final Degree Project is a project that is prepared and defended individually and through which the student integrates the skills developed in the rest of the degree, facing the completion of a Data Science project in any of its possible aspects, including research and development.

The organisation and assessment of the Final Degree Project (TFG) is regulated as a general rule by the Final Degree Project Regulations, approved by the Governing Council of the University of Valencia (http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C61.pdf) and by the instructions developed by the Escola Tècnica Superior d'Enginyeria de la Universitat de València ETSE-UV (http://www.uv.es/uvweb/enginyeria/es/estudis-grau/graus/treball-fi-grau/informacio-general-1285885225985.html).

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

In order to complete the Final Degree Project, students must have passed 180 ECTS credits of the syllabus, which will necessarily include the first two years of the Degree.

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

1406 - Degree in Data Science

- (CG02) Ability to solve problems with initiative and creativity and to communicate and transmit knowledge, abilities and skills, which should include the ethical and professional responsibility of the activity of a data scientist.
- (CG03) Capability to elaborate models, calculations, reports, to plan tasks and other works analogous to the specific field of data science.
- (CT04) To be responsible for one?s own professional development and specialisation, applying the acquired knowledge in the identification of career opportunities and sources of employment.
- (CT05) Ability to evaluate the advantages and disadvantages of different methodological and / or technological alternatives in different fields of application.
- (CE16) Ability to develop an original exercise, to do it individually, as well as to present it and defend it before a university board, on the field of data science, in which the acquired competences are synthesised and integrated in the lessons.
- (CB1) Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- (CB5) Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.

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

Ability to carry out specific work or research in the field of data science.
Know how to apply the knowledge and skills acquired to aspects related to the performance of the profession.
Ability to develop, present and defend before a committee a work related to the graduate profile that has been defined through the general objectives indicated in this report (CB1, CB5, CG2, CG3, CT4, CT5, CETFG).

DESCRIPTION OF CONTENTS

1. Final Degree Project

The Final Degree Project is conceived as an element that allows students to increase their skills in aspects that are not easy to acquire with the typical structure of classroom classes. The type of work to be carried out can be very variable, although always within the lines set by the objectives and competences established for the Bachelor's degree. In any case, it can be said that the final objective of the project is to apply the competences acquired during the degree to the activity of Data Science. In general, 4 general topics will cover the offers of the departments involved in the teaching of the GCD:

1) Application: Starting from a data set, Data Science stages are developed that solve the problem posed in the form of a starting hypothesis.

2) Methodology: Development of a variant of a technique, method or model of any of the Data Science stages and showing the advantages and limitations of the proposal.

3) Software: Development of a software application in which a concrete or specific task linked to any of the Data Science stages is carried out.

4) Review: Systematic review of topicality or interest related to a topic focused on Data Science.

WORKLOAD

ACTIVITY	Hours	% To be attended
Graduation project		100
Realización del Trabajo Fin de Grado	300,00	0
TOTAL	**300,00**	

TEACHING METHODOLOGY

MD6 - Final Degree Project. Individual and original work carried out by the student and related to the use and development of the methodologies and techniques learned and the skills acquired.

Students must develop a work tutored by a professor of the UVEG with teaching in the degree. The work can be proposed either by the tutor or by the student. In any case, the tutor will approve the objectives to be achieved in the project and ensure that the student's work allows to assess compliance with the skills set out in the objectives of the Degree in Data Science. Student and tutor will be in regular contact. In any case, the tutor must hold a minimum of two working meetings with the student, one to establish the objectives of the work and another during the preparation of the report, to assess the level of compliance with the objectives set. However, whenever the agents deem it appropriate, working sessions may be held to analyse the progress of the project. The Final Degree Project may be carried out in an institution outside the UVEG. In any case, always under the approval and supervision of the tutor assigned by UVEG.

The student will be involved in all stages of the project. However, within large teams it is normal that the distribution of work means that some aspects of a project are carried out by other members of the team or even other teams. The student shall express these circumstances in the final report and shall expressly mention his/her direct or indirect participation in the different phases of his/her work.

Workload for students out of the total workload of the subject: 100%.

EVALUATION

SE5 - Assessment of the report, presentation and defence of the Final Degree Project in which the competences acquired in the course are synthesised.

The Final Degree Project must be defended in a public session before a university examining board made up of the student's tutor and two members of the teaching staff (assigned to degrees with teaching in the GCD of the UV) appointed by the TFG Committee of the degree. The student will have 15 minutes to present their work to the examining board and then the members of the examining board may discuss with the student any aspects of their work that they consider relevant.

Once the work has been defended, the examining board will be constituted as a grading committee and will proceed to grade the project according to the scale of the TFG Commission of the Degree. Basically, this scale indicates that the examining board, jointly, evaluates up to 80% of the student's grade, divided into the following aspects:
- Scientific-technical quality (40%)
- Quality of the documentation (20%)
- Presentation and defence (20%)

In addition, the tutor will issue a specific assessment of the work carried out by the student to complete 20% of the mark. This report, assessed between 0 and 10 points, will contain an evaluation of:
- Scientific-technical quality of the work carried out
- Quality of the report
- Student's attitude

The three members will sign a report which will include the numerical grade of the work. In any case, the evaluation of the subject will be done according to the Regulation of evaluation and qualification of the Universitat de València for bachelor's and master's degrees approved by the Governing Council of 30 May 2017 (ACGUV 108/2017).

The examining board must indicate unanimously if a TFG (with a mark higher or equal to 9), is a candidate to obtain the qualification of Honours, for which it must prepare a brief report. The TFG committee, depending on these reports and the number of registrations, will decide which TFGs will finally obtain this qualification. The assignment of the qualification of Honours will be carried out following the criteria established in the ETSE regulations on TFGs.

REFERENCES

Basic

- Cunha, Irida da., and Ma. Teresa Cabré. El trabajo de fin de grado y de máster [Recurso electrónico]: redacción, defensa y publicación / Iria da Cunha.Teresa Cabré. Editorial UOC, 2016. https://trobes.uv.es/permalink/34CVA_UV/um6gse/alma991009392357306258
- Sánchez Asín, Antonio. Trabajos de fin de grado y de postgrado: guía práctica para su elaboración / Antonio Sánchez Asín...[et. al.]. Aljibe, 2016.
- Baelo Álvarez, Manuel. El arte de presentar trabajos académicos ante un tribunal: TFG, TFM y tesis doctoral: guía práctica para estudiantes universitarios / Manuel Baelo Álvarez. 2a ed, Círculo Rojo, 2017.

Additional

- Aprèn a fer el TFG (treball fi de grau): fons i organització de la informació (APRÈNTFG) https://www.uv.es/uvweb/servicio-bibliotecas-documentacion/es/formacion/cursos-linea-apren-ci2-apren-tfg/formacion-linea-1285915536101.html