COURSE DATA

Data Subject	
Code	34844
Name	Degree final project in Multimedia Engineering
Cycle	Grade
ECTS Credits	12.0
Academic year	2021 - 2022

Study (s)

Degree	Center	Acad. year	Period
1407 - Degree in Multimedia Engineering	School of Engineering	4	Annual

Subject-matter

Degree	Subject-matter	Character
1407 - Degree in Multimedia Engineering	11 - Trabajo de Fin de Grado de Ingeniería Multimedia	End Labour Studies

Coordination

Name	Department
GARCIA FERNANDEZ, IGNACIO	240 - Computer Science

SUMMARY

The purpose of the Final Year Project (FYP) is to provide students with a global and unified vision of the planning, management and regulations applicable to any kind of multimedia computer project. This work is mandatory and poses a load of 12 ECTS credits that supposes300 hours of student's average activity and 20 hours of tutor supervision This will be carried out at the end of undergraduate studies, once passed the other subjects. This willbe an original exercise performed individually, that will be presented and defended to a university tribunal. It will consist of a project in the area of specific technologies covered in the degree and will have professional character. It will synthesize and integrate the skills acquired in the teachings of Multimedia Engineering Degree.

The Final Year Project is a work prepared and defended individually and through which the student integrates the skills developed in the rest of the grade, facing the realization of a software engineering project in any of its possible aspects, including research and development.

The organization and evaluation of the Final Project (TFG) is regulated by the Reglamet de Treball Fi de Grau, approved by the Council ofGovernment of the University of Valencia (http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C61.pdf) and instructions developed by the Escola Tècnica Superior d'Enginyeria of the University of Valencia ETSE-UV (http://www.uv.es/uvweb/ingenieria/en/estudios-grado/grados/trabajo-fin-grado/informacion-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

To carry out the Final Year Project will be required to have passed 180 ECTS curriculum, necessarily including the first two courses of the degree and the subject that develops the contents on "Project Management" included in the matter "Software Engineering and Project Management "

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

1405 - Degree in Multimedia Engineering

- G1 - Be able to relate and structure information from different sources and to integrate ideas and knowledge. (RD1393/2007)
- G2 - Have the learning skills needed to undertake further studies or to gain further training with a certain degree of autonomy. (RD1393/2007)
- G3 - Take into account the economic and social context in engineering solutions, be aware of diversity and multiculturalism and ensure sustainability and respect for human rights and equality between men and women.
- G4 - Be able to integrate into working groups and collaborate in multidisciplinary environments and be able to communicate properly with professionals from all fields.
- MM5 - Know how to apply the theoretical and practical resources to deal with a multimedia application as a whole.
- MM6 - Conceive, design, and implement projects related to multimedia products by using engineering methodologies, applying the principles of human resources management and applying economic principles.
- MM12 - Know current 2D and 3D graphic systems and their application to multimedia developments.
- MM21 - Communicate effectively, both in writing and verbally, knowledge, procedures, results and ideas related to ICT and specifically to multimedia, and know their socioeconomic impact.

- MM22 - Have knowledge and ability to understand essential facts, concepts, principles and theories related to multimedia and to the spectrum of reference disciplines.
- MM23 - Make proper use of theories, procedures and tools in the professional development of multimedia engineering in a real context (specification, design, implementation, deployment and evaluation of multimedia systems solutions).
- MM26 - Be able to conceive, develop and maintain multimedia systems, services and applications using the methods of software engineering as a tool for quality assurance, according to the knowledge acquired as described in the specific competences.
- MM29 - Know how to carry out measurements, calculations, assessments, appraisals, surveys, studies, reports, task planning, and other analogous work in the field of multimedia applications, according to the knowledge acquired as described in the specific competences.
- PFG1 - Be able to prepare an original project individually in the field of specific technologies of multimedia engineering in which the skills acquired during the learning process are synthesised and integrated. Also, be able to present and defend it properly in front of a university panel.

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

Learning outcomes of the completion of the Final Year Project are:

- Understand the basic principles of Project Management in the field of Multimedia Engineering, and be able to use them to create, analyze and select plausible alternatives for solving the problems in their work environment.

- Write and develop a project memory in the field of Multimedia Engineering.

- Show critical thinking skills, creativity and decision-making.

- Knowledge of standardized methodologies, tools and disciplines for project management.

- Master the basic techniques to introduce a computerized internal control mechanism within an organization and to perform an audit.

- Possess learning skills to continue and update their training throughout working life with a high degree of autonomy.

DESCRIPTION OF CONTENTS

1. An introduction to the Project Management

The Final Year Project is proposed as an opportunity for students to increase their skills in areas that are not easily acquired in the context of typical classroom lessons, such as:interacting with clients, developing formal specifications of problems, elaborating specialized literature review on a topic, building prototypes, arising technical documentation or conducting an oral defense of ideas.The kind of project to be undertaken can be very variable, but always within the guidelines set by the objectives and

competencies established for the graduate degree. In any case, we can say that the goal of the project is to apply the skills acquired during the degree to the activity of the Computer Engineering.The contents of the matter will differ depending on the specific objectives of the project selection. In general, the projects will be related to one or more of the following:
1) Analysis, design and development of systems, applications or IT services
2) implementation of computer systems
3) The evaluation, maintenance and auditing of computer systems
Etc

WORKLOAD

ACTIVITY	Hours	% To be attended
Graduation project		100
Development of a final project	300,00	0
TOTAL	**300,00**	

TEACHING METHODOLOGY

The students should develop a work supervised by a professor inside UVEG teaching in the Degree. The work can be proposed both by the tutor as by the student. In any case, the tutor will approve the goals to be achieved in the project and will ensure that student work allows valuing the fulfillment of the competencies established in the objectives of the Multimedia Degree.Student and tutor will be in regular contact. In any case, tutor must maintain a minimum of two meetings with the student, one to set the objectives of the project and another during preparation of the memory, to assess the level of compliance with the objectives. Nevertheless, if agents deem it appropriate, may be conducted working sessions to analyze the evolution. The Final Project will be held in an institution external to the UVEG. In any case, always under the approval and supervision of the UVEG appointed tutor.

The student will be involved in all stages resulting from undertaking the project. However, within large teams, it is common that the distribution of work is done so that some project tasks are carried out by other team members or even by other teams.These circumstances must appear explicitly in project memoryand the student must make express mention to direct or indirect participation in the different phases of their work.

Workload for students on the total load of the matter: 100%

EVALUATION

The organization and evaluation of the Final Year Project (FYP) is regulated by the Reglamet de Treball Fi de Grau, approved by the Council of Government of the University of Valencia (http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C61.pdf) and instructions developed by the Escola Tècnica Superior d'Enginyeria of the University of Valencia ETSE-UV (http://www.uv.es/uvweb/engineering/en/undergraduate-degree-studies/degrees/-undergraduate-degree-final-project-/general-information-1285885225985.html) (* 1).

The Final Year Project should be defend in public session in a court composed of the tutor college student and two faculty members (assigned to degrees with teaching in the Department of Informatics UV) appointed by the Commission of the FYP of the degree. The student will have 15 minutes to present to the court the work developed, and then the court members will discuss with the student aspects considered relevant for their work. After the defense, the court an -will constitute qualifying committee and proceed to qualify the project following the schedule of the Commission of the FYP of the degree. Basically, this scale indicates that the court together, evaluated up to 80% of the student's grade divided into the following aspects:

- Scientific-technical quality (40%)

-Quality of documentation (20%)

-Presentation and defense (20%)

In addition, the tutor shall deliver a specific assessment of the work done by the student to complete 20% of the grade. This report, evaluated between o 10 points, shall contain the following assessments:

-Scientific-technical quality of work performed (up 5.0 points out of 10)

-Quality of memory (up 3.0 points out of 10)

-Attitude of students (up 2.0 points out of 10)

In addition to the quality of the different sections that are evaluated from the report, and given the importance of certain concepts, students must include the following sections in their report. Otherwise, the final grade will be reduced by the factors that appears next to each item.

State of the Art	0,5
Requirement definition F/NF	0,5
Time schedule and costs	0,5
Use Case Diagram*	0,5
Use Case Specification*	0,25
Class Diagram *	0,5
System Operation Interaction Diagrams*	0,5
Test studies	0,5

Budgetary assessment	0,25

(*) Sections required only for software development projects

Moreover, students in mobility programs may make the FYP in the target center. In that case, the project will have to be approved by the exchange coordinator of the degree, by delegation of the Commission of FYP, assigning a UV academic tutor. In case that the student undertake an FYP defense in the target center and can demonstrate the competence of public presentation, the FYP Commission will delegated score recognition the exchange coordinator of the degree. Otherwise, there will be a public defense in UV on the same basis as other students, recognizing the portion corresponding to work and the memory submitted in target center, weighing destination and the corresponding part of the public defense of the UV.

The three members sign a record which shall contain work numerical rating. In any case, the evaluation of this subject will be done in compliance with the University Regulations in this regard, approved by the Governing Council on 30th May 2017 (ACGUV 108/2017)

The assignment of Excellent with Distinction will follow the instructions developed by the ETSE on FYP (* 1).

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REFERENCES

Basic

- Referencia b1: Project Management Institute, "A Guide to the Project Management Body of Knowledge", 4th edition, Project Management Institute (2008), ISBN: 19-33890517
  Referencia b2: Domingo Ajenjo, A. Dirección y Gestión de Proyectos, un enfoque práctico. Editorial Rama, (2005). ISBN: 9701511301.
  Referencia b3: Martín, G; Dawson, C. El proyecto fin de carrera en ingeniería informática. Editorial Prentice Hall; ISBN: 84-20535605.

Additional

- Referencia c1: Pereña, J. "Dirección y Gestión de Proyectos". Editorial Díaz de Santos (1991). ISBN: 8479782498
  Referencia c2: Grashina M.N; Newell M.W, Preguntas y Respuestas Sobre La Gestión de Proyectos, Editorial Gestión 2000, (2005). ISBN: 9788480886864
  Referencia c3: Gómez, J. F; Coronel, A.J; Martinez de Irujo, L; Lorente, A. "Gestión de proyectos".

FC Editorial. Madrid, (2000). ISBN: 84-28317747.

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

If it is required by the sanitary situation, the Academic Committee of the Degree will approve the Teaching Model of the Degree and its adaption to each subject, establishing the specific conditions in which it will be developed, taking into account the actual enrolment data and the space availability.