# COURSE DATA

| Data Subject | |
|---|---|
| **Code** | 44292 |
| **Name** | External internships |
| **Cycle** | Master's degree |
| **ECTS Credits** | 6.0 |
| **Academic year** | 2022 - 2023 |

**Study (s)**

| Degree | Center | Acad. year | Period |
|---|---|---|---|
| 2199 - M.D. in Electronic Engineering | School of Engineering | 1 | Annual |

**Subject-matter**

| Degree | Subject-matter | Character |
|---|---|---|
| 2199 - M.D. in Electronic Engineering | 6 - External internships | External Practice |

**Coordination**

| Name | Department |
|---|---|
| GONZALEZ MILLAN, VICENTE | 242 - Electronic Engineering |

# SUMMARY

Through External Practices is intended to reinforce the training of university students in the operational areas Institutions or Companies for professionals with a real vision of the problems and their interrelationships, preparing the future incorporation to the research or productive work.

The University established through agreements with institutions or companies, partnership programs in practice for the training of students.

The internship program is established for the training of students in the final year of the Master of the ETSE and is adapted to the established number of credits (6 ECTS).

The company and activity to be performed are assigned from a list of institutions and companies with the agreement established with the University of Valencia through ADEIT, or others with the student to establish a contact, subject to approval by the organs of the Academic Coordination Commission of 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

Since this is a course that emphasizes the application of knowledge acquired during the master will be held in the second semester. The start date is expected during the month of January. The background needed are those that have been taught during the first semester.

# OUTCOMES

## 2199 - M.D. in Electronic Engineering

- 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.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- 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.
- Diseñar un sistema, componente o proceso que cumpla unas especificaciones desde diferentes puntos de vista: electrónico, económico, social, ético y medioambiental.
- Demostrar una comprensión sistemática de un campo de estudio y el dominio de las habilidades.
- Realizar un análisis crítico, evaluación y síntesis de ideas nuevas y complejas.
- Ser capaz de fomentar, en contextos académicos y profesionales, el avance tecnológico, social o cultural dentro de una sociedad basada en el conocimiento.
- Capacidad para proyectar, calcular y diseñar productos, procesos e instalaciones en todos los ámbitos de la Ingeniería Electrónica y en particular los de tratamiento de la señal, sistemas digitales y de comunicaciones y electrónica industrial.
- Capacidad para dirigir, planificar y supervisar equipos multidisciplinares.
- Capacidad para el modelado matemático, cálculo y simulación en todos los ámbitos relacionados con la Ingeniería Electrónica y campos multidisciplinares afines. En especial los de tratamiento de la señal, sistemas digitales y de comunicaciones y electrónica industrial.

- Students should possess and understand foundational knowledge that enables original thinking and research in the field.

## LEARNING OUTCOMES

The student should be able to:

- Teamwork.
- Learn to manage different customer relationships.
- Be aware of the ethical component and the ethical principles of professional practice.
- Become aware of the fundamental rights and equality between men and women in the workplace.
- Acquire appropriate professional skills.
- Develop skills of cooperation with other professionals.
- Make contact with the specific aspects of the practice of the profession.

## DESCRIPTION OF CONTENTS

### 1. Development of External the Practice.

The contents of the field will be different depending on the particular practice that should be carried out. Listed below are generically possible activities that can be performed during internships:

- Electronic
- Power Electronics
- Analog and Digital Electronic Systems
- Programming microcontrollers and PLCs
- Electrical and Electronic Maintenance
- Robotics and automation
- Electrical.
- Design of electronic products
- Renewables

## WORKLOAD

| ACTIVITY | Hours | % To be attended |
|---|---|---|
| Classroom practices | 60,00 | 100 |
| Attendance at events and external activities | 150,00 | 0 |
| TOTAL | 210,00 | |

## TEACHING METHODOLOGY

Teaching methods to be used in the development of the course are:

- Company work while attending practice, seminars or specific courses.
- no student class work: preparing reports and presentation of results.
- Individual or group tutoring.

## EVALUATION

Measured by the staff report externships considering:

a) The report of the tutor of the company, which shall contain: (40%)

- Compliance with the estimated times.
- The ability to integrate into the working group.
- Evaluation of the activity performed by the student.

b) The final report of the activities in the company, which objectively determine the difficulty of the tasks performed and the relation to matters of degree. Contain at least the following (40%):

- Relationship with the training practice studies
- Providing the student at the center of practice
- New knowledge and skills acquired
- Relationship with center staff practices and methodology work

c) courses or seminars you have attended the student, both taught by the university as the training center. (10%)

d) Interview with student tutor practices in college. (10%)

The shares allocated to each section are indicated in each case. The completion of the total hours of practice is a necessary condition for the evaluation. The percentage of the particular valuation of each subsection depends on the judgment of the tutor of the university in according to the characteristics of the practice.

## REFERENCES

### Basic

- Prácticas en empresas ADEIT http://www.adeituv.es/practicas-en-empresas/