

Academic Year/course: 2022/23

## 69164 - Professional Internships 1

### Syllabus Information

---

**Academic Year:** 2022/23

**Subject:** 69164 - Professional Internships 1

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 615 - Master's in Robotics, Graphics and Computer Vision/ Robótica, Gráficos y Visión por Computador

**ECTS:** 3.0

**Year:**

**Semester:** Second semester

**Subject Type:** Optional

**Module:**

## 1. General information

### 1.1. Aims of the course

By carrying out the external academic practices, the following objectives are to be achieved:

- Contribute to the comprehensive training of students by complementing their theoretical and practical learning.
- Facilitate knowledge of the work methodology appropriate to the professional reality in which students they will have to operate, contrast and apply the acquired knowledge.
- Encourage the development of technical, methodological, personal and participatory skills.
- Obtain practical experience that facilitates entry into the job market and improves their employability future.
- Favor the values of innovation, creativity and entrepreneurship.

### 1.2. Context and importance of this course in the degree

The External Academic Practices constitute a training activity included in the degree's study plan within the optional modules. They allow the student to put into practice and advance in the generic and specific competences acquired in the Master's subjects in a real and applied environment, thus developing instrumental, interpersonal and systemic skills that can greatly support their future capacity for professional performance, personal development and, ultimately, an adequate integration in a labor market.

### 1.3. Recommendations to take this course

The student must consult the information and regulations on external academic practices available in the following link:

<http://eina.unizar.es>

## 2. Learning goals

### 2.1. Competences

Basic competences:

- CB6 ? To possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.
- CB7 - That students know how to apply the acquired knowledge and ability to solve problems in new or

little-known settings within broader (or multidisciplinary) contexts related to their area of study.

- CB8 - That students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.

General competences:

- CG06 ? To have developed sufficient autonomy to participate in research projects and scientific or technological collaborations within their subject area, in interdisciplinary contexts and, where appropriate, with a high component of knowledge transfer.
- CG07 - Ability to take responsibility for your own professional development and specialization in one or more fields of study.
- CG08 ? To possess the aptitudes, skills and method necessary to carry out multidisciplinary research and / or development work in the fields of Robotics, Graphics and / or Computer Vision.

Specific competences:

- CE09 - Ability to autonomously carry out a work of initiation to research and / or development in the field of Robotics, Graphics, or Computer Vision, in which the skills acquired in the degree are synthesized and integrated.

## 2.2. Learning goals

The student must be able to:

- Know and demonstrate the ability to carry out the usual tasks of specialist / engineer / researcher in robotics, graphics and computer vision in the company, the administration or the academy.
- Formally present the professional activity carried out, synthesizing the content and fundamental conclusions.

## 2.3. Importance of learning goals

The learning results achieved through external academic practices allow the student jointly apply the competences and skills acquired in the various subjects of the curriculum, conferring in turn the possibility of initiating activities, in a tutored way, in a scenario similar to the one they will find in a future work environment.

# 3. Assessment (1st and 2nd call)

## 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The students must show that they have achieved the learning results expected in the training program through the following evaluation activities that must be recorded, from which the academic tutor will carry out the evaluation, as indicated in this section:

- Meetings held between the tutor and the student.
- Interim report (for practices of 6 or more credits) made and delivered at the equator thereof, which collect the assessment of the development of the Training Project.
- Final memory of the practices, carried out and delivered by the student.
- The exposition and defense of the memory before the academic tutor. It will have a maximum duration of 15 minutes, in function of the contents and objectives of the practices, and may continue in a discussion with the tutor on any aspect related to them.
- Assessment report of the tutor in the collaborating entity (format provided by UNIVERSA).
- Ssessment questionnaire completed by the student on the practices carried out (following the format provided by UNIVERSA).
- Other activities that, where appropriate, the academic tutor considers necessary.

The Final Report must include, among others, the following aspects:

- Student personal data
- Collaborating entity where practices are carried out

- Concrete and detailed description of the tasks, developed works and departments of the entity to which the student was assigned.
- Assessment of the tasks carried out with the knowledge and skills acquired in relation to the university studies.
- List of problems raised and the procedure followed for their resolution.
- Identification of the contributions that, in the matter of learning, have resulted from the practices.
- Evaluation of practices and suggestions for improvement.

The academic tutor will assign the grade, based on the evaluation activities indicated in the previous section, in the final evaluation report, which will also reflect the assessment of the following sections:

- E03 - Oral presentations and debates of the practices: 20%
- E04 - Memory and its public defense (including assessment of the tutor in the collaborator entity, and degree of achievement of the objectives of the training project of the practices): 80%

The grading of the practices will be carried out using the same scale as in the rest of the subjects and according to the academic year in which students are enrolled.

Those students who, as of September 30, have not provided all the necessary documentation for the evaluation of the practices registered during said course, including the final evaluation report of your academic tutor, may be evaluated the following year after renewal of their enrollment.

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

The learning process constitutes an active method based on the integration of the student himself in the collaborating entity, in which they assumes the initiative of their training through personal research, direct contact with the reality and experiences of the working group in which it is integrated. All this encourages:

- Strong motivation for the student.
- An increase in difficulty
- A bridge is created between theoretical abstraction and practical reality
- Facilitates auto-detection of errors
- Facilitates the student's personal autonomy
- Develops the acquisition of information and research skills and abilities.

The following are the teaching methodologies that will be used within the activities of the subject:

- M10 - Tutoring.
- M11 - Evaluation.
- M16 - Complementary activities.
- M17 - External practices.

### 4.2. Learning tasks

The learning activities that comprise the performance of external academic practices are the following:

- Activities developed during the practices themselves (work day adapted to the circumstances of the collaborating entity and the student)
- Follow-up by the tutor in the collaborating entity
- Personalized tutoring sessions with the academic tutor
- Autonomous work of the student for the elaboration of the intermediate report, the final memory, and the preparation of the presentation

The course consists of between 3 and 9 ECTS credits (in groups of 3) that represent an estimated dedication by the student between 75 and 225 hours, divided into the following activities:

- A06 - Personalized teacher-student guardianship: up to 9

- A08 - Assessment tests: 2
- A10 - External internships until: 214

### 4.3. Syllabus

The professional internship program will be established, prior agreement with the collaborating entity and the academic tutor, and will remain embodied in the Training Project in accordance with the provisions of section 3.2.

In application of current regulations, the assessment of the practices will be done at the rate of 25 hours per credit, up to a maximum of 750 hours of practices in total.

According to the provisions of the verification report of the Master, and according to its duration, the subjects of research internships offered for enrollment and evaluation in this title are the following:

Code	Designation	Workload (duration)
69164	Professional Internships 1	3 ECTS credits (75 hours)
69165	Professional Internships 2	3 ECTS credits (75 hours)
69166	Professional Internships 3	3 ECTS credits (75 hours)

Notes:

- The different codes respond to all the enrollment needs that may arise according to how the internships are carried out unitarily or during different periods of the same course.
- The subject codes with the same workload must be registered consecutively.

### 4.4. Course planning and calendar

The optional subjects of professional internships corresponding to this Master can involve up to a maximum of 9 ECTS credits (225 hours), according to the sections and dedication indicated previously.

The distribution of workloads will be specified in each case by mutual agreement between the collaborating entity and the student and, for guidance purposes, its breakdown will include the following activities:

- Work in the collaborating entity where the internship is carried out
- Personalized academic student-tutor tutoring sessions.
- Assessment of written report and oral defense.
- Autonomous work of the student for the preparation of the intermediate report, final report, and preparation of the presentation.

The schedule of activities to be carried out during the internships will also be specified by mutual agreement between the collaborating entity and student and with the agreement of the academic tutor depending on the training project.

Students interested in undertaking external academic internships are encouraged to contact with the teacher to whom they wish to propose the functions of academic tutor or, if they do not have a preference, contact the coordinator of the degree to guide them on the designation of an academic tutor.

The content and objectives of the practices, associated with the skills and competences conferred by the degree, materialize in the Formative Project agreed with the academic tutor and that is part of the documentary dossier of the practice.

In addition, the student must contact the Orientation and Employment service, UNIVERSA, of the University of Zaragoza <http://www.unizar.es/universa/>, which will be in charge of the administrative procedures necessary to establish the link between the student and the entity where the internship will take place, as well as the entire administrative process.

During the internship, the student must perform the functions assigned in the time established in accordance with the supervision of the tutor in the collaborating entity, follow the indications of the academic tutor of the university during the practice development for monitoring and evaluation, and communicate any incident that occurs.

Finally, at the end of the practices, and within the deadlines established for this purpose, they must prepare, deliver and defend their work.