

Work Placement

Code: 44530
ECTS Credits: 12

Degree	Type	Year	Semester
4315985 Geoinformation	OB	0	2

Contact

Name: Pere Serra Ruiz

Email: pere.serra@uab.cat

Use of Languages

Principal working language: catalan (cat)

Teachers

Pere Serra Ruiz

Prerequisites

The Work Placement module is done necessarily in the second semester, after the rest of the specialty courses had finished.

To register for the course Pràctiques Externes/Prácticas Externas or Practicum, one must contact the Masters coordinator so that the profile of the student who requests to do an internship and the suitability of the internship in connection to the competences and the learning outcomes of the Masters programme can be evaluated.

Objectives and Contextualisation

The Work Placement has an essential role in the Master's degree as an important educational experience and a first contact with the professional world.

The goal of the Work Placement is to carry out a definite professional project, from start to end, with specific objectives and tangible results. This project has to be a proposal from an external organization (company, government or institution) with the aim of testing the student's abilities and knowledge acquired throughout the whole Master's programme, and also to complete the education programme with specific advanced contents, added according to the needs of each particular project and organization. The ultimate goal then is to develop the student ability to think and implement methodological and technical solutions to solve specific needs of an organization in the field of geoinformation.

The Work Placement is also the basis to develop the Master Final Dissertation.

Competences

- Analyze user needs and the formal and interface requirements to define and design end- user geospatial applications in corporate environments or those open to the public.

- Apply programming methodologies and procedures, and those for implementation of geospatial applications for different types of platforms (desktop, web, mobile), using different programming paradigms and environments.
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Continue the learning process, to a large extent autonomously.
- Design and elaborate cartographic documents and, in general, geovisualization of geospatial data products, and implement the corresponding production and publication processes using analogue and digital media.
- Design and manage geospatial information application products or services.
- Design and manage geospatial information systems, integrating spatial and alphanumeric, relational and object-oriented data bases, in client-server distributed architectures, or those oriented to services.
- Develop and apply geospatial and alphanumeric information analysis methodologies to resolve urban or land management problems, generating useful information for the implementation of intelligent processes and for decision making.
- Direct and manage geospatial information systems, services, products and applications projects, from a strategic, technical, economic and human resources and materials angle.
- Integrate geospatial information technologies, services and applications with the aim of providing an optimal solution to each application case.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
- Use knowledge critically and understand and take on board the ethical responsibility, legislation and social implications of the use and diffusion of geospatial information and its derived products.

Learning Outcomes

1. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
2. Continue the learning process, to a large extent autonomously.
3. Define technological solutions that help to develop end-user geospatial applications tailored to specific situations and requirements.
4. Design and implement databases tailored to the needs of a real case.
5. Develop cartographic visualisation products that respond to the specific needs of an organisation.
6. Direct and manage geospatial information systems, services, products and applications projects, from a strategic, technical, economic and human resources and materials angle.
7. Generate and manage projects organised by content criteria.
8. Integrate geospatial information technologies, services and applications with the aim of providing an optimal solution to each application case.
9. Manage the human, technical and material resources for executing projects to produce and distribute geospatial information products or services.
10. Programme ubiquitous and smart web or mobile applications for geospatial information that respond to the needs of an organisation.
11. Satisfy spatial-analysis needs in a specific application dominion.
12. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
13. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
14. Use knowledge critically and understand and take on board the ethical responsibility, legislation and social implications of the use and diffusion of geospatial information and its derived products.

Content

The Work Placement consists in a 150 hours stage in an external organization (company, government or institution). The practical work develops according to a project with defined goals, schedule and results, having the aim that it constitutes a specific project in itself instead of a cumulative series of partial and disconnected tasks.

The Work Placement projects are proposed by the collaborative organizations so they could be real application cases, they be of interest to the organizations and involve them, and reinforce the sense of professional commitment by the student as they are in a reduced scale a professional order. Master's coordination revises and negotiates with each organization the project proposal to ensure its quality, feasibility and proportionality with respect to the educational nature of the Work Placement.

According to this goal, the search and selection of collaborative organizations is done by the Master's coordination. This ensures also that there will be as many organizations and projects as students in the Master's programme. Students, therefore, do not have to search by themselves the Work Placement organization, but they can suggest organizations to the Master's coordination if they have any.

The Work Placement is done at the second half of the second semester, so it does not interfere with the rest of courses of the Master's programme. This ensures also that students had received most of the programme courses and therefore they have advanced skills to undertake an actual professional project. During the Work Placement each student has a supervisor from the external organization and an academic tutor from the master's teachers.

Methodology

The Work Placement involves mainly autonomous work by the student, that includes the applied activity of research and implementation, bibliographical and documental search, and report writing to document the tasks done.

Autonomous work is complemented by directed activities like tutorials and supervised activities for testing and quality control of the project results. Directed and supervised activities are carried out by the academic tutor and can involve, when needed, the supervisor from the collaborative organization.

The activities that could not be done onsite will be adapted to an online format made available through the UAB's virtual tools. Exercises, projects and lectures will be carried out using virtual tools such as tutorials, videos, Teams sessions, etc. Lecturers will ensure that students are able to access these virtual tools, or will offer them feasible alternatives.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Tutorials	8	0.32	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14
Type: Supervised			
Revisión de resultados y control de calidad	8	0.32	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14
Type: Autonomous			
Investigación y desarrollo	224	8.96	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14

Assessment

In the event that assessment activities cannot be taken onsite, they will be adapted to an online format made available through the UAB's virtual tools (original weighting will be maintained). Homework, activities and class

participation will be carried out through forums, wikis and/or discussion on Teams, etc. Lecturers will ensure that students are able to access these virtual tools, or will offer them feasible alternatives.

a) Evaluation procedure and activities:

Work Placement is evaluated according to three components: material results (video) of the practical work done during the Work Placement (30% of the grading), student report (25%) and the supervisor report (45%).

b) Evaluation schedule:

The evidences for Work Placement evaluation (material results, student reports, supervisor report) must be submitted at the end of the 2nd semester.

c) Grade revision:

Once the grades obtained are published, students will have one week to apply for a grade revision by arranging an appointment with the corresponding teachers.

d) Procedure for reassessment:

The Work Placement can not be reassessed.

e) Conditions for a 'Not assessable' grade:

Students will receive the grade 'Not assessable' instead of 'Fail' if they had not submitted the material results of the practical work done during the Work Placement and if the supervisor's report does not prove that they completed the 300 hours of practical work.

f) UAB regulations on plagiarism and other irregularities in the assessment process:

In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject.

Assessment activities with a zero grade because of irregularities can not be reassessed.

g) No Matrícula d'Honor grade is awarded due to the optional nature of this grade and the heterogeneity of this subject in the different degrees taught in the Faculty. The course Pràctiques Externes cannot be reassessed in the event that the student fails.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Material results of the Work Placement project (video)	30	30	1.2	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14
Student report	25	25	1	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14
Supervisor report	45	5	0.2	3, 6, 4, 5, 7, 9, 8, 10, 12, 1, 2, 11, 13, 14

Bibliography

Not applicable.

Software

Not aplicable.