

**In Initial or Apprenticeship training, DS4H Masters curricula give students the opportunity to shape their own education profile, combining personal development and skills development to closely match the requirements of their future professional career in higher education, research, R&D, start-up creation...**

DS4H Masters' curricula organization (4 semesters, 120 ECTS)

		Apprenticeship		Academic Track		
S1 S2 S3	21 ECTS	MAJOR				21 ECTS
		Computer Science	Electrical Engineering	Digital Strategy	Digital Law & IP	Other major
	9 ECTS	Alternating schedule 3 days in classroom / 2 days in a company or 1 week/1 week			Minor or Disciplinary optional course 1 choice/semester	3 ECTS
		Personalized Project			6 ECTS	
		Individual Tutorship 2 or 3 semesters in-lab immersion	Multidisciplinary Project • Business innovation • Societal innovation • Humanities & Creative Industries • Research	Disciplinary Project		
S4	30 ECTS	Full-time company immersion		Internship (full time) company, laboratory, innovation/entrepreneurship		
					30 ECTS	

### Why choose the Apprenticeship training curriculum?

- To acquire theoretical and practical skills meeting the requirement of employers.
- To facilitate integration into the labour market, alternating between education and real-life professional situations.
- To benefit from an enriched educational support thanks to an apprenticeship supervisor.
- To live in the shoes of a paid employee.
- To be hired right after the curriculum.

### Why choose the Initial training curriculum?

- To open to complementary cross-disciplinary skills (minors).
- To take advantage of an innovative pedagogy based on group projects.
- To build an individualized profile thanks to the wide variety of options (in-lab immersion tutorship, multidisciplinary projects...).
- To choose the more accurate end-of-course internship within a company, a laboratory or in an innovation/entrepreneurship project.
- To benefit from the largest variety in employment opportunities.

## Initial training curriculum options

Each student curriculum is personalized according to the options (minors) and the projects selected.

### Minors or specialization (3 ECTS / semester, about 30 teaching hours)

Each semester, the student selects either:

- 1 out of the **15 minors** proposed to open to new domains and to complement the basic training with new skills in Informatics, Electronics, Law, Economy, Innovation management... These minors are taught in English. They have little prerequisites to remain as accessible as possible;
- or an optional disciplinary **specialization course** in the Major domain.

### Personalized project (6 ECTS / semester, about 1 working day per week)

#### Individual Tutorship

Tutorships provide training to research by immersion in a laboratory. The student joins a team from a laboratory associated with DS4H and works on a research topic under the supervision, and with the support, of a tutor.

To validate his enrolment in a tutored project, the student must choose at the beginning of the semester a subject from those proposed by the tutors or propose one himself. The students get in touch with the tutors to seek a working framework agreement on a 2 or 3 semesters period (S1+S2, S2+S3 or S1+S2+S3).

On the 4<sup>th</sup> semester, the tutored project can lead to an internship within the hosting laboratory, but other types of pursuit remain possible: the student can change laboratories for his research internship, decide to complete an internship within a company or manage an innovation/entrepreneurship project. 2-semester long tutorships allow students to carry out another type of project on S1 or S3.

#### Multidisciplinary Group Projects

Every multidisciplinary project implies teams of students with different educational backgrounds.

- **Business Innovation Projects** (DEMOLA, operated by Invent@UCA). Students work in a co-creation process to propose innovative solutions to a real problem defined by a company or a public entity. A facilitator follows on the project and ensures the link with the company.
- **Societal Innovation Projects** (SOLVE, operated by Invent@UCA). Students work on a societal problem co-defined by the students and the supervision team.
- **Humanities & Creative Industries Projects** (operated by the Master HIC). These projects offer initiation to creativity. They are jointly designed and managed by the 1<sup>st</sup> and 2<sup>nd</sup> year students. The projects are monitored by the HIC supervision team and results are presented during an innovation show.
- **Research Projects**. Research projects address cross-disciplinary topics. They are supervised by the academic supervisors who proposed the subject.

#### Disciplinary Projects

The students have the possibility to carry out projects in their field of expertise (Major), working either autonomously or within a group from 2 to 4 students, under the direction of a project supervisor.

## End-of-course Internship

On the 4<sup>th</sup> semester, all students must complete a full-time internship:

- **Within a company**, under the supervision of a training supervisor;
- **Within a laboratory**, under the supervision of an academic supervisor;
- **In an innovation/Entrepreneurship project** as part of the Invent@UCA program.