



**DOTTORATO DI RICERCA IN
TECHNOLOGY, INNOVATION AND MANAGEMENT (DTIM)**



STUDY PLAN – DTIM PROGRAM

- **Compulsory courses** for 30 ECTS (6 hours/ECTS), with final verification, as follows:
 - A. Foundations Area, 15 ECTS;
 - B. Thematic Area, 10 ECTS;
 - C. Summer School, 5 ECTS.
- **Elective courses** taken from Master degrees, for 12 ECTS, with no final verification.

Total number of credits for the three-year PhD period: 42 ECTS

COMPULSORY COURSES OFFERED BY THE PROGRAM

- **Foundations Area, 2 courses, 15 ECTS**

AREA	COURSE	CONTENT	HOURS
Foundations 15 ECTS– 90 hours	Methods for research 5 ECTS – 30 hours	Research Design, Scientific writing, Oral presentation	6
		Intellectual property management	12
		Research ethics	3
		Fund raising and project writing and management (e.g., European project H2020 and FP9)	9
		Total	30
	Research Applied Methods 10 ECTS – 60 hours	Simulation methods and tools	18
		Design of Experiments – DOE	6
		Applied Statistics (Econometrics and Monte Carlo methods)	12
		Product and process sustainability	12
		Applied programming (Matlab, VBA, Python, Access)	12
	Total	60	
	Total	Total	90

- **Thematic Area, 10 ECTS:**
 - a. **At least 2 thematic courses (at least 5 ECTS)**
 - At least 2 thematic courses must be chosen (5 ECTS) among the 4/5 yearly offered in different thematic areas by DTIM;
 - Minimum of three students for a thematic course to be activated;
 - b. **PhD courses offered by other doctoral programs. Thematic workshops.**
- **Summer School, 5 ECTS**
 - Summer School for PhD students or other Summer Schools.

ORGANIZATION NOTES

- Courses in the **Foundations Area** are offered to 1st year students, by means of videoconferencing;
- Courses in the **Thematic Area** are offered to 2nd year students, by means of videoconferencing o skype.