

MASTER IN ARTIFICIAL INTELLIGENCE AND ROBOTICS

DETAILED PROGRAMME

- **Part-time mode**

- **First year (Master 1):**

Semester 1	Total	Lectures	Tutorials	Practicals	Credits
Programming languages for AI	40	10	10	20	3
Maths for AI	40	20	10	10	3
Maths	40	20	10	10	2
Signal Processing	40	15	5	20	3
Embedded Programming	40	10	12	18	3
Entrepreneurship- Innovation	20	10	10		2
Research methodology	20	10	10		2
Algorithm for Artificial Intelligence	30	8	8	14	3
Networking and Security	40	10	10	20	3
Semester Project	30				5
	340	113	85	112	30

Semester 2	Total	Lectures	Tutorials	Practicals	Credits
Machine Learning	40	10	10	20	3
Internet of Objects/ Web and Mobile	40	10	5	25	3
Evolutionary / Bioinspired Algorithm	30	15	10	5	3
Digital Image Processing	40	10	15	15	3
Control Systems 1	40	20	10	10	3
Industrial Robotics	30	10	5	15	3
Perception and Mobile Robotics	30	10	5	15	3
Project Management and Quality	20	5	5	10	2
Communication and Scientific Publication	20	5	5	10	2
Semester Project	30				5
	320	95	70	125	30

- **Year 2 (Master 2):**

Semester 3	Total	Lectures	Tutorials	Practicals	Credits
Multi Agents Systems / Distributed AI	30	10	5	15	3
Neural Networks and Deep Learning	40	15	10	15	3
Bid Data and Data Mining	30	10	10	10	3
Advanced Tools for AI and Robotics	30	10	10	10	3
Control systems 2	30	10	10	10	3
Drones and Applications	30	5	5	20	3
Sensors, Data and Localisation	30	10	10	10	3
Organising Conferences	20	5	5	10	2
Ethics and law	20	5	5	10	2
Project	30				5
	290	80	70	110	30

Semestre 4	Duration	ECTS
<p>Internship / Industrial training</p> <ul style="list-style-type: none"> • Possibility of internship in research lab abroad, France* • Possibility of internship in companies abroad, France* <p>*(Modalities to be communicated at a later stage)</p>	6 months	30

Project reports and Presentations can be in either English or French.