

Piano di Studi LM
Artificial Intelligence and Automation Engineering
Classe LM-32
Coorte A.A. 2023/24
Curriculum Intelligent Systems

Primo Anno

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF	Eventuali Mutuazioni
Digital Image Processing	ING-INF/03	6	54	I	C	Advanced digital image processing Laurea Magistrale in Electronics and Communications Engineering
High Performance Computer Architecture	ING-INF/05	9	72	I	B	
Machine Learning (mod. Fundamentals of Machine Learning)	ING-INF/05	6	54	I	B	
Machine Learning (mod. Neural Networks)	ING-INF/05	6	54	I	B	
Discrete Event Systems	ING-INF/04	6	54	II	B	
Big Data	ING-INF/05	6	54	II	B	
Artificial Intelligence	ING-INF/05	9	63	II	B	
Models and Languages for Bioinformatics	INF/01	6	54	II	C	
Network Optimization	MAT/09	6	48	II	C	Optimization Laurea Magistrale in Applied Mathematics
Totale CFU dell'anno		60				

Secondo Anno

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF	Eventuali Mutuazioni
Design of Applications, Services and Systems	ING-INF/05	9	72	I	B	
2 insegnamenti dal seguente gruppo						
Bioinformatics	ING-INF/05	6	54	I	B	Foundations and Languages for Bioinformatics (mod. Bioinformatics) Laurea Magistrale in Applied Mathematics
Advanced Machine Learning	ING-INF/05	6	48	I	B	
Language Processing Technologies	ING-INF/05	6	54	I	B	
Attività a scelta dello studente		12		I/II	D	
Tirocinio		6	150	II	F	
Prova finale (tesi)		21			E	
Totale CFU dell'anno		60				

Curriculum Robotics and Automation

Primo Anno

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF	Eventuali Mutuazioni
Complex Systems	ING-INF/04	6	48	I	B	Differential Equations and Complex Systems (mod. Complex Dynamic Systems) Laurea Magistrale in Applied Mathematics
System Identification and Data Analysis (mod. System Identification)	ING-INF/04	6	48	I	B	
Human-Centered Robotics	ING-INF/04	6	54	I	B	
Fundamentals of Machine Learning	ING-INF/05	6	54	I	B	
Artificial Intelligence	ING-INF/05	9	63	II	B	
System Identification and Data Analysis (mod. State Estimation and Filtering)	ING-INF/04	6	48	II	B	
Network Optimization	MAT/09	6	48	II	C	Optimization Laurea Magistrale in Applied Mathematics
Discrete Event Systems	ING-INF/04	6	54	II	B	
Industrial Robotics	ING-INF/04	6	48	II	C	
Attività a scelta dello studente		6		I/II	D	
Totale CFU dell'anno		63				

Secondo Anno

denominazione attività formativa/insegnamento	SSD	CFU	Ore	Sem.	TAF	Eventuali Mutuazioni
Advanced Control Systems (mod. Robust and Predictive Control)	ING-INF/04	6	50	I	B	
Dynamic Programming and Reinforcement Learning	ING-INF/04	6	48	I	B	
Advanced Control Systems (mod. Applied Nonlinear Control)	ING-INF/04	6	48	II	B	
Sensors and Microsystems	ING-INF/07	6	60	II	C	Laurea Magistrale in Electronics and Communication Engineering
Attività a scelta dello studente		6		I/II	D	
Tirocinio		6	150	II	F	
Prova finale (tesi)		21			E	
Totale CFU dell'anno		57				

**Attività automaticamente approvate come scelta
Curriculum Intelligent Systems**

Human-centered robotics	ING-INF/04	6	54	I	D	
Dynamic Programming and Reinforcement Learning	ING-INF/04	6	54	I	D	
System Identification	ING-INF/04	6	54	I	D	
Industrial Robotics	ING-INF/04	6	48	II	D	
Cybersecurity	ING-INF/03	6	54	II	D	
Bioinformatics*	ING-INF/05	6	54	I	D	
Advanced Machine Learning*	ING-INF/05	6	48	I	D	
Language Processing Technologies*	ING-INF/05	6	54	I	D	

* se non scelto come caratterizzante

**Attività automaticamente approvate come scelta
Curriculum Robotics and Automation**

High Performance Computer Architecture	ING-INF/05	9	72	I	D	High performance computer architecture
Bioinformatics	ING-INF/05	6	54	I	D	
Language Processing Technologies	ING-INF/05	6	54	I	D	
Advanced Machine Learning	ING-INF/05	6	48	I	D	
Neural Networks	ING-INF/05	6	54	I	D	
Big Data	ING-INF/05	6	54	II	D	
Game Theory	ING-INF/04	6	48	II	D	
Models and Languages for Bioinformatics	INF/01	6	54	II	D	
Digital Embedded Electronics for Smart Industry	ING-INF/01	9	90	II	D	
Digital Modelling, Design and Manufacturing	ING-IND/13	6	54	I	D	