



CHOOSE YOUR BLOCK: A ☐ B ☐ C1 ☐ C2 ☐ D ☐ E ☐

A.Y. 2026-27

Study Plan in Mechatronics Engineering

STUDENT ID

FAMILY NAME

First Name

Your Bachelor's degree

e-mail

☐ 1st year

☐ 2nd year

Year of enrollment

MANDATORY SUBJECTS for ALL BLOCKS 78 cfu

Y	s	SUBJECTS	CFU	SSD2024	BLOCK	A	B	C	D	E
1	I	INTEGRATED SENSORS	9	IINF-01/A	ALL	9	9	9	9	9
1	II	NANOTECHNOLOGY	6	IINF-01/A	ALL	6	6	6	6	6
1	II	VLSI CIRCUIT AND SYSTEM DESIGN	9	IINF-01/A	ALL	9	9	9	9	9
2	I	CONTROL OF MECHANICAL SYSTEMS	9	IINF-04/A	ALL	9	9	9	9	9
2	I	ELECTRONICS OF IOT AND EMBEDDED SYSTEMS	12	IINF-01/A	ALL	12	12	12	12	12
2	I	ROBOT MECHANICS	9	IIND-02/A	ALL	9	9	9	9	9
2	II	COMPUTER VISION	6	IMIS-01/B	ALL	6	6	6	6	6
2	II	POWER ELECTRONICS AND ELECTRICAL DRIVES	9	IINF-01/A	ALL	9	9	9	9	9
2	II	POWERTRAIN TECHNOLOGIES FOR FUTURE MOBILITY	9	IIND-06/A	ALL	9	9	9	9	9

+ one BLOCK

CFU

78

BLOCK A - MECHANICS AND DIGITAL TRANSITION 24 cfu

						A				
1	I	DIGITAL MODELING OF ENERGY CONVERSION	6	IIND-06/A	A-B	☐				
1	I	MECHANICS OF SYSTEMS FOR SIMULATIONS	6	IIND-02/A	A-B	☐				
1	II	MECHANICS OF MATERIALS AND STRUCTURES	6	CEAR-05/A	A-E	☐				
2	II	MACHINE DESIGN	6	IIND-03/A	A	☐				

BLOCK B - ELECTRONICS AND DIGITAL TRANSITION 24cfu

							B			
1	I	DIGITAL ELECTRONICS	6	IINF-01/A	B		☐			
1	I	DIGITAL MODELING OF ENERGY CONVERSION	6	IIND-06/A	A-B		☐			
1	I	MECHANICS OF SYSTEMS FOR SIMULATIONS	6	IIND-02/A	A-B		☐			
<i>opt B – One of the following 2 subjects:</i>										
1	II	Analogue Electronics*	6+3	IINF-01/A	B		☐			
1	II	Electronic Interfaces	6	IINF-01/A	B-C1-C2-E		☐			

BLOCK C1 - MECHATRONICS SYSTEMS AND ICT - Learning and Communication 24 cfu

1	I	INNOVATIVE MATERIALS WITH LABORATORY	6	IIND/03C	C1-E			☐		
opt C1.a – One of the following 3 subjects:										
1	I	Opt C1.a choose one	6	IINF-03/A	C1			6		
1					C1			☐		
1					C1			6		
opt C1.b – One of the following 5 subjects:										

Opt C1.b choose one

				IINF-03/A	C1-C2			6		
					C1-C2			9		
					B-C1-C2-E			6		
					C1			6		
					C1			6		
2	II	CONTROL OF ELECTRICAL MOTORS AND VEHICLES	6	IINF-04/A	C1-C2-E			☐		

Date of submission dd/mm/yyyy

Date of Approval

Student's signature

Study Plan in Mechatronics Engineering

FAMILY NAME

STUDENT ID

BLOCK C2 - MECHATRONICS SYSTEMS AND ICT - Interconnected Electric Vehicle Engineering 24 cfu							C2		
1	II	INTEGRATED SOLUTIONS FOR SUSTAINABLE MOBILITY AND ENERGY PRODUCTION	6	IIND-06/A	C2			☐	
opt C2.a – One of the following 3 subjects:									
Opt C2.a choose one				ING-INF/01	C2				
			6	ING-INF/02	C2			☐	
				ING-INF/03	C2				
opt C2.b – One of the following 4 subjects:									
1	II	Opt C2.b choose one		ING-INF/03	C1-C2			☐	
1	II			ING-INF/03	C1-C2			6*	
1	II			ING-IND/32	C2				
1	II			ING-INF/01	B-C1-C2-E				
2	II	CONTROL OF ELECTRICAL MOTORS AND VEHICLES	6	IINF-04/A	C1-C2-E			☐	
BLOCK D - Computational Methods 24 cfu								D	
1	I	MATHEMATICAL METHODS FOR PHYSICS	8	PHYS-05/A	D			☐	
1	I	NUMERICAL METHODS FOR ASTROPHYSICS	6	PHYS-02/A	D			☐	
2	I	LABORATORY – CALCULUS	4	IINF-01/A	D			☐	
opt D – One of the following 2 subjects:									
2	II	Machine Learning Methods for Physics	6		D			☐	
2	II	Quantum Computing	6		D			☐	
BLOCK E - ELECTROMECHANICS 24 cfu									E
1	I	INNOVATIVE MATERIALS WITH LABORATORY	6	IIND-03/C	C1-E			☐	
opt E.a – One of the following 2 subjects:									
1	II	Electronic Interfaces	6	IINF-01/A	B-C1-C2-E			☐	
1	I	Characterization of nano-engineering systems NEW	6	PHYS-03/A	E			☐	
opt E.b – One of the following 2 subjects:									
1	I	Mathematics of Feedback Control (ex FCS)	6	IINF-04/A	E			☐	
2	II	Control of Electrical Motors and Vehicles	6	IINF-04/A	C1-C2-E			☐	
opt E.c – One of the following subjects (6 or 2+2+2):									
1	I	NMR of nano-systems NEW	2		E			☐	
1	I	Nanoscale Structural Transformations and Kinetics NEW	2	IIND-03/C	E			☐	
1	I	Nano-engineering seminar+ project 3 NEW	2	CHEM-06/A	E			☐	
1	II	Mechanics of Materials and Structures	6	CEAR-05/A	A-E			☐	
					CFU	24	24	24	24
*opt B Analogue Electronics 9 cfu							3		
*opt C1.b - C2.b Digital Signal Processing 9 cfu							3		
1-2	I	FORMATIVE ACTIVITIES/INTERNSHIP	6		ALL			6	
2		FINAL EXAM	12		ALL			12	
TOTAL CREDITS								120 or *123	

Date of submission

Date of Approval

Student's signature

School Office (Simona Ranieri)

The Coordinator (Prof. C.M. Verrelli)

Reserved to the Management office