



**Descrizione del percorso formativo**

**BACHELOR DEGREE COURSE IN  
INFORMATION ENGINEERING**

*Study programme for students enrolled in the academic year 2025-2026*

<b>1st YEAR</b>		
<b>MANDATORY UNITS</b>	<b>HOURS</b>	<b>CREDITS</b>
CALCULUS 1	96	12
FOUNDATIONS OF COMPUTER SCIENCE	96	12
PHYSICS 1	96	12
LINEAR ALGEBRA	96	12
DIGITAL SYSTEMS	72	9
<b>2nd YEAR</b>		
<b>MANDATORY UNITS</b>	<b>HOURS</b>	<b>CREDITS</b>
CALCULUS 2	72	9
PHYSICS 2	72	9
DATA STRUCTURES AND ALGORITHMS	72	9
PROBABILITY THEORY	72	9
SIGNALS AND SYSTEMS	72	9
ELECTRIC CIRCUITS	48	6
INTRODUCTION TO MACHINE LEARNING	48	6
<b>3rd YEAR</b>		
<b>MANDATORY UNITS</b>	<b>HOURS</b>	<b>CREDITS</b>
ELECTRONICS	72	9
TELECOMMUNICATIONS	72	9
CONTROL SYSTEMS	72	9

<b>1 FREE-CHOICE UNIT AMONG THE FOLLOWING:</b>	<b>HOURS</b>	<b>CREDITS</b>
ALGORITHMS IN ENGINEERING	48	6
INFORMATION TRANSMISSION MEDIA	48	6
<b>1 FREE-CHOICE UNIT AMONG THE FOLLOWING:</b>	<b>HOURS</b>	<b>CREDITS</b>
SYSTEMS AND MODELS	72	9
MICROCONTROLLERS AND DSP	72	9
INTERNET AND SECURITY	72	9
<b>18 ADDITIONAL FREE-CHOICE CREDITS</b>	<b>HOURS</b>	<b>CREDITS</b>
INTERNET AND MULTIMEDIA LABORATORY	48	6
SIGNALS AND MEASUREMENT LABORATORY	48	6
COMPUTER ENGINEERING LABORATORY	48	6
OPTICAL ENGINEERING LABORATORY	48	6
TRANSMISSION MEDIA LABORATORY	48	6
MICROELECTRONICS LABORATORY	48	6
CONTROL SYSTEMS LABORATORY	48	6
ICT AND SUSTAINABILITY	48	6
<b>FURTHER MANDATORY ACTIVITIES</b>	<b>HOURS</b>	<b>CREDITS</b>
ENGLISH FOR STEM		3
COMPUTER SKILLS (CFU included in Foundations of Computer Science)		3
PRACTICAL TRAINING		0
FINAL THESIS		3
<b>ANY FURTHER NOTES</b>		
The Bachelor Degree in Information Engineering is managed by the Department of Information Engineering ( <a href="https://www.dei.unipd.it/">https://www.dei.unipd.it/</a> ) which belongs to the School of Engineering ( <a href="https://www.ingegneria.unipd.it/">https://www.ingegneria.unipd.it/</a> ).		
Educational activities are organized in semesters.		
Class attendance is not compulsory, but strongly recommended.		
To take second-year exams, students must:		
- have acquired at least 24 credits (CFU) by passing the first-year exams detailed in the bachelor degree prospectus (or recognized as equivalent);		
- have taken Calculus 1 and/or Linear Algebra exams.		
To take third year exams, students must:		
- have acquired at least 72 credits (CFU);		
- have taken all the first-year exams detailed in the bachelor degree prospectus (or recognized as equivalent)		