

**University of Pavia**  
**Study Course: ELECTRICAL ENGINEERING - 06419**  
**Classe LM-28 Ingegneria elettrica**  
**Regulations 2021/2022 - Course Regulations a.y. 2022/2023**  
**Study Plan academic year 2023/2024**

STUDENT NUMBER N. .... SURNAME- NAME .....

**1° Year - academic year 2022/2023**

Learning Activity	CFU	N°	N° (ind.)	Compulsory	Scientific Area	Type of learning activity	Period
509665 - APPLIED ELECTROMAGNETISM*	12	1		X			
Teaching Unit APPLIED ELECTROMAGNETISM							
509666 - NUMERICAL METHODS IN ELECTROMAGNETISM *	6				ING-IND/31	Distinctive	
509667 - OPTIMAL DESIGN IN ELECTROMAGNETISM AND ELECTROMAGNETIC ENVIRONMENTAL COMPATIBILITY *	6				ING-IND/31	Distinctive	
509668 - ELECTRICAL SYSTEMS*	12	2		X			
Teaching Unit ELECTRICAL SYSTEMS							
509669 - ADVANCED ELECTRICAL MACHINES *	6				ING-IND/32	Distinctive	
509670 - ELECTRIC POWER SYSTEMS*	6				ING-IND/33	Distinctive	
509671 - INDUSTRIAL MEASUREMENTS AND COMMUNICATION SYSTEMS*	9	3		X			
Teaching Unit INDUSTRIAL MEASUREMENTS AND COMMUNICATION SYSTEMS							
509672 - INDUSTRIAL COMMUNICATION SYSTEMS*	3				ING-IND/32	Related/Supplementary	
509673 - INDUSTRIAL ELECTRICAL MEASUREMENTS*	6				ING-INF/07	Distinctive	
509674 - POWER ELECTRONICS*	6	4		X	ING-IND/32	Distinctive	
509675 - DESIGN AND TECHNOLOGY OF ELECTRICAL MACHINES*	6	5		X	ING-IND/32	Distinctive	
509676 - ENERGY MANAGEMENT*	9	6		X			
Teaching Unit ENERGY MANAGEMENT							
508286 - PLANNING OF ENERGY CONVERSION SYSTEMS*	6				ING-IND/32	Distinctive	
509677 - MICROGRIDS*	3				ING-IND/32	Related/Supplementary	
<i>FREE CHOICE FROM THE UNIVERSITY COURSE OFFER</i>	6	7				<i>Optional</i>	
509079 - ENERGY MARKETS AND SUPPLY STRUCTURE*	6	7			ING-IND/32	Optional	
504115 - IMPIANTI DI ENERGIA SOLARE E DI ENERGIA DA BIOMASSE	6	7			ING-IND/32	Optional	
501062 - TERMOFISICA DELL'EDIFICIO	6	7			ING-IND/11	Optional	
504462 - PROCESS CONTROL	6	7			ING-INF/04	Optional	
504463 - ROBOT CONTROL	6	7			ING-INF/04	Optional	
504719 - ROBOTICS	6	7			ING-INF/05	Optional	
504717 - INDUSTRIAL CONTROL	6	7			ING-INF/04	Optional	
507218 - ELECTRONICS FOR INDUSTRIAL MEASUREMENTS	6	7			ING-INF/01	Optional	
502993 - MICROSENSORI, MICROSISTEMI INTEGRATI E MEMS*	6	7			ING-INF/07	Optional	
502156 - ACCUMULO E CONVERSIONE DI ENERGIA	6	7			CHIM/07	Optional	
509712 - SCENARI ENERGETICI	6	7			GEO/02	Optional	
503297 - IMPIANTI EOLICI*	3	7			ING-IND/03	Optional	
504126 - IMPIANTI IDROELETTRICI*	3	7			ICAR/01	Optional	
508741 - INTRODUZIONE ALLA NORMAZIONE TECNICA*	3	7			ING-IND/33	Optional	
503313 - TRAZIONE ELETTRICA*	3	7			ING-IND/31	Optional	
509609 - MANAGEMENT OF PHOTOVOLTAIC SYSTEMS*	3	7			ING-INF/01	Optional	
509631 - DIAGNOSTICS FOR ELECTRICAL MACHINES*	3	7			ING-IND/32	Optional	
510151 - SUSTAINABILITY MANAGEMENT	3	7			ING-IND/32	Optional	
503356 - COMPLEMENTI DI ELETTRONICA*	3	7			ING-INF/01	Optional	
<b>TOT. 60 CFU</b>							

\* Learning activities included in the lecture schedule

## 2° Year - academic year 2023/2024

Learning Activity	CFU	N°	N° (ind.)	Compulsory	Scientific Area	Type of learning activity	Period
509678 - INDUSTRIAL DRIVES*	12	8		X			
Teaching Unit INDUSTRIAL DRIVES							
504723 - ELECTRICAL DRIVES FOR INDUSTRIAL APPLICATIONS*	9				ING-IND/32	Distinctive	
508303 - ENERGY EFFICIENCY IN COMPRESSED AIR SYSTEMS*	3				ING-IND/32	Related/Supplementary	
504710 - NUMERICAL METHODS IN ENGINEERING SCIENCES*	6	9			MAT/08	Related/Supplementary	
502886 - SISTEMI DINAMICI: TEORIA E METODI NUMERICI	6	9			MAT/08	Related/Supplementary	
504464 - ORGANIZATION THEORY AND DESIGN*	6	10			SECS-P/06	Related/Supplementary	
509679 - PLANNING AND OPERATION OF POWER SYSTEMS*	6	10			ING-IND/33	Related/Supplementary	
509680 - ELECTRIC VEHICLES*	6	10			ING-IND/32	Related/Supplementary	
509681 - SYSTEMS AND TECHNOLOGIES FOR THE SMART GRID*	6	10			ING-IND/32	Related/Supplementary	
509079 - ENERGY MARKETS AND SUPPLY STRUCTURE*	6	10			ING-IND/32	Related/Supplementary	
504115 - IMPIANTI DI ENERGIA SOLARE E DI ENERGIA DA BIOMASSE*	6	10			ING-IND/32	Related/Supplementary	
501062 - TERMOFISICA DELL'EDIFICIO*	6	10			ING-IND/11	Related/Supplementary	
509679 - PLANNING AND OPERATION OF POWER SYSTEMS*	6	11			ING-IND/33	Related/Supplementary	
509680 - ELECTRIC VEHICLES*	6	11			ING-IND/32	Related/Supplementary	
509681 - SYSTEMS AND TECHNOLOGIES FOR THE SMART GRID*	6	11			ING-IND/32	Related/Supplementary	
509079 - ENERGY MARKETS AND SUPPLY STRUCTURE*	6	11			ING-IND/32	Related/Supplementary	
504464 - ORGANIZATION THEORY AND DESIGN*	6	11			SECS-P/06	Related/Supplementary	
504115 - IMPIANTI DI ENERGIA SOLARE E DI ENERGIA DA BIOMASSE*	6	11			ING-IND/32	Related/Supplementary	
501062 - TERMOFISICA DELL'EDIFICIO*	6	11			ING-IND/11	Related/Supplementary	
504462 - PROCESS CONTROL*	6	11			ING-INF/04	Related/Supplementary	
504463 - ROBOT CONTROL	6	11			ING-INF/04	Related/Supplementary	
504719 - ROBOTICS	6	11			ING-INF/05	Related/Supplementary	
504717 - INDUSTRIAL CONTROL*	6	11			ING-INF/04	Related/Supplementary	
507218 - ELECTRONICS FOR INDUSTRIAL MEASUREMENTS	6	11			ING-INF/01	Related/Supplementary	
510150 - MICROSENSORS, INTEGRATED MICROSYSTEMS AND MEMS*	6	11			ING-INF/07	Related/Supplementary	
502156 - ACCUMULO E CONVERSIONE DI ENERGIA	6	11			CHIM/07	Related/Supplementary	
FREE CHOICE FROM THE UNIVERSITY COURSE OFFER	6	12				Optional	
509679 - PLANNING AND OPERATION OF POWER SYSTEMS*	6	12			ING-IND/33	Optional	
509680 - ELECTRIC VEHICLES*	6	12			ING-IND/32	Optional	
509681 - SYSTEMS AND TECHNOLOGIES FOR THE SMART GRID*	6	12			ING-IND/32	Optional	
509079 - ENERGY MARKETS AND SUPPLY STRUCTURE	6	12			ING-IND/32	Optional	
510188 - ECONOMICS OF DIGITAL MARKETS	6	12			SECS-P/06	Optional	
504464 - ORGANIZATION THEORY AND DESIGN*	6	12			SECS-P/06	Optional	
504115 - IMPIANTI DI ENERGIA SOLARE E DI ENERGIA DA BIOMASSE*	6	12			ING-IND/32	Optional	
509682 - HISTORY OF TECHNOLOGY	6	12			ING-IND/31	Optional	
501062 - TERMOFISICA DELL'EDIFICIO*	6	12			ING-IND/11	Optional	
504462 - PROCESS CONTROL*	6	12			ING-INF/04	Optional	
504463 - ROBOT CONTROL	6	12			ING-INF/04	Optional	
504719 - ROBOTICS	6	12			ING-INF/05	Optional	
504717 - INDUSTRIAL CONTROL*	6	12			ING-INF/04	Optional	
507218 - ELECTRONICS FOR INDUSTRIAL MEASUREMENTS	6	12			ING-INF/01	Optional	
510150 - MICROSENSORS, INTEGRATED MICROSYSTEMS AND MEMS*	6	12			ING-INF/07	Optional	
502156 - ACCUMULO E CONVERSIONE DI ENERGIA	6	12			CHIM/07	Optional	
509712 - SCENARI ENERGETICI	6	12			GEO/02	Optional	
508100 - AUTOMATED MECHANICAL SYSTEM DESIGN*	6	12			ING-IND/13	Optional	

509683 - SAFETY IN ENGINEERING AND TECHNOLOGY*	3	12			ING-IND/31	Optional	
503297 - IMPIANTI EOLICI*	3	12			ING-IND/03	Optional	
504126 - IMPIANTI IDROELETTRICI*	3	12			ICAR/01	Optional	
503313 - TRAZIONE ELETTRICA*	3	12			ING-IND/31	Optional	
509609 - MANAGEMENT OF PHOTOVOLTAIC SYSTEMS*	3	12			ING-INF/01	Optional	
509631 - DIAGNOSTICS FOR ELECTRICAL MACHINES*	3	12			ING-IND/32	Optional	
503356 - COMPLEMENTI DI ELETTRONICA*	3	12			ING-INF/01	Optional	
510151 - SUSTAINABILITY MANAGEMENT*	3	12			ING-IND/32	Optional	
510782 - OPTIMAL SYNTHESIS OF METAMATERIALS FOR 5G AND 6G TELECOMMUNICATIONS	3	12			ING-IND/31	Optional	
510783 - ELECTRICAL MACHINES FOR ADVANCED APPLICATIONS	3	12			ING-IND/31	Optional	
507220 - PLANNING, MANAGEMENT AND SUPPLY OF GOODS AND SERVICES*	3	13**			ING-IND/35	Other	
500376 - PROGRESSO UMANO E SVILUPPO SOSTENIBILE	3	13**			SECS-P/02	Other	
509683 - SAFETY IN ENGINEERING AND TECHNOLOGY*	3	13**			ING-IND/31	Other	
503297 - IMPIANTI EOLICI*	3	13**			ING-IND/03	Other	
504126 - IMPIANTI IDROELETTRICI*	3	13**			ICAR/01	Other	
503313 - TRAZIONE ELETTRICA*	3	13**			ING-IND/31	Other	
509609 - MANAGEMENT OF PHOTOVOLTAIC SYSTEMS*	3	13**			ING-INF/01	Other	
509631 - DIAGNOSTICS FOR ELECTRICAL MACHINES*	3	13**			ING-IND/32	Other	
503356 - COMPLEMENTI DI ELETTRONICA*	3	13**			ING-INF/01	Other	
510151 - SUSTAINABILITY MANAGEMENT*	3	13**			ING-IND/32	Other	
509536 - ITALIAN LANGUAGE FOR FOREIGN STUDENTS	3	13			NN	Other	
503327 - MASTER THESIS	18				PROFIN_S	Final Exam	
<b>TOT. 60 CFU</b>							

\* Learning activities included in the lecture schedule

\*\* Choose 6 CFU for choice n° 13

- [For the semester assigned to each training activity, refer to the timetable published on the Faculty website](#)
- [For more information please refer to the course catalogue](#)

Date .....

Signature .....

**The study plan is not to be modified. Students can apply for an exception but they have to submit a valid motive.**

**When a student submit a change which is not proposed in a standard study plan, the study plan became an individual study plan.**

**In order to do so, draw a line on the subject you wish to change, add the new subject in the orange boxes at the end of the study plan.**

**Insert the progressive number assigned to the subject you wish to change.**

**Please note that a revenue stamp of 16€ is due to apply for an individual study plan. This new plan will have to be approved by the committee designated by the competent Teaching Council.**