UNIVERSITÀ DI PAVIA

DIPARTIMENTO DI INGEGNERIA INDUSTRIALE E DELL'INFORMAZIONE

DEPARTMENT OF INGEGNERIA INDUSTRIALE E DELL'INFORMAZIONE

Corso di Laurea Magistrale in

Master's Degree in

ELECTRONIC ENGINEERING

PIANO DI STUDIO PER GLI ISCRITTI AL 1° ANNO – DM 270/'04 ANNO ACCADEMICO 2026/2027

STUDY PLAN FOR STUDENTS ENROLLED IN 1°YEAR – DM 270/04 ACADEMIC YEAR 2026/2027

La/Il sottoscritta/o / *The undersigned*,

Matricola / *Matriculation number* .....

Cognome / *Surname*..... Nome / *Name*.....

Nata/o a / *Born in (city)* ..... Prov./ *State* ..... il / *on* .....

Residente in / *Resident in (city)*..... Prov./ *State* .....

CAP / *Postal code* ..... Via o Piazza / *Street name* .....

N. civico / *number* ..... Tel. / *Phone* .....

Corso di Laurea Magistrale in ELECTRONIC ENGINEERING

Master's Degreein ELECTRONIC ENGINEERING

prevede i seguenti percorsi: */ includes the following tracks:*

- **TRACK 01 - MICROELECTRONICS**
- **TRACK 02 - PHOTONICS**
- **TRACK 03 - SPACE COMMUNICATION AND SENSING**

Gli studenti che intendono effettuare scelte diverse che si discostano dal modello di piano di studi che segue presenteranno un piano di studi individuale (per il quale è prevista una marca da bollo da euro 16,00 che verrà generata dagli uffici). Maggiori informazioni sono disponibili sulla pagina dedicata https://portale.unipv.it/it/didattica/corsi-di-laurea/studiare/piani-di-studio nella sezione Eccezioni: il piano cartaceo.

Students who wish to make choices not provided by the following form should submit an individual study plan (in this case administrative offices will generate a fee of €16 for an extra revenue stamp). More information is available at the dedicated webpage: https://portale.unipv.it/it/didattica/corsi-di-laurea/studiare/piani-di-studio in the section "Exceptions: Study plan submitted in paper form".

APPROVATO NELLA RIUNIONE DEL CONSIGLIO DIDATTICO/CONSIGLIO DI DIPARTIMENTO DEL / *Approved in the session*

of the Teaching Council/Department Council on .....

SI DICHIARA LA CONFORMITA' DEL PIANO INDIVIDUALE ALL'ORDINAMENTO DIDATTICO DEL CORSO DI STUDIO IN RELAZIONE ALLA COORTE DI APPARTENENZA DELLO STUDENTE (SCHEDA RAD). / *It is declared that the individual plan follows the course regulations depending on the student's year of enrollment (RAD form).*

FIRMA DEL REFERENTE DEL CORSO DI LAUREA MAGISTRALE/ *Signature of the Program Coordinator*

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TRACK 01 - MICROELECTRONICS

1° Year - academic year 2026/2027 - 63 CFU

ATTIVITÀ FORMATIVA Courses	CFU cfu	Vecchio Settore Scientifico Old Disciplinary Sector	Nuovo Settore Scientifico New Disciplinary Sector	TAF/Ambito TAF/Teaching Field	Tipo Insegnamento Course Type	Periodo Period
510810 - ADVANCED MATHEMATICAL AND NUMERICAL METHODS FOR ENGINEERS	9				Compulsory	First Semester
Teaching unit of Advanced mathematical and numerical methods for engineers						
504434 - ADVANCED MATHEMATICAL METHODS FOR ENGINEERS	*3*	*MAT/05*	*MATH-03/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
504710 - NUMERICAL METHODS IN ENGINEERING SCIENCES	*6*	*MAT/08*	*MATH-05/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
507294 - INTRODUCTION TO QUANTUM MECHANICS	3	FIS/03	PHYS-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	First Semester
504990 - INTEGRATED CIRCUIT DEVICES	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	First Semester
504435 - ANALOG INTEGRATED CIRCUITS	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	First Semester
504439 - RF MICROELECTRONICS	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester
505002 - ELECTRONIC INSTRUMENTATION AND TECHNOLOGIES	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester
504437 - MICROWAVES	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester
504440 - DIGITAL IC DESIGN	6	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester

TRACK 02 - PHOTONICS

1° Year - academic year 2026/2027 - 60 CFU

ATTIVITÀ FORMATIVA Courses	CFU cfu	Vecchio Settore Scientifico Old Disciplinary Sector	Nuovo Settore Scientifico New Disciplinary Sector	TAF/Ambito TAF/Teaching Field	Tipo Insegnamento Course Type	Periodo Period
510810 - ADVANCED MATHEMATICAL AND NUMERICAL METHODS FOR ENGINEERS	9				Compulsory	First Semester
Teaching unit of Advanced mathematical and numerical methods for engineers						
504434 - ADVANCED MATHEMATICAL METHODS FOR ENGINEERS		*MAT/05*	*MATH-03/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
504710 - NUMERICAL METHODS IN ENGINEERING SCIENCES		*MAT/08*	*MATH-05/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
504992 - OPTOELECTRONIC DEVICES	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	First Semester
508745 - INTRODUCTION TO QUANTUM MECHANICS AND QUANTUM TECHNOLOGIES	6	FIS/03	PHYS-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	First Semester
One course among:						
504444 - ANTENNAS	6	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Elective	First Semester
510150 - MICROSENSORS, INTEGRATED MICROSYSTEMS AND MEMS	6	ING-INF/07	IMIS-01/B	Distinctive/Ingegneria elettronica	Elective	First Semester
504437 - MICROWAVES	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Compulsory	Second

						Semester
504994 - OPTICAL COMMUNICATIONS	6	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester
510153 - QUANTUM ELECTRONICS AND NONLINEAR OPTICS	9	FIS/03	PHYS-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	Second Semester
504998 - DIGITAL COMMUNICATIONS	6	ING-INF/03	IINF-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	Second Semester

TRACK 03 - SPACE COMMUNICATION AND SENSING

1° Year - academic year 2026/2027 - 63 CFU

ATTIVITÀ FORMATIVA Courses	CFU cfu	Vecchio Settore Scientifico Old Disciplinary Sector	Nuovo Settore Scientifico New Disciplinary Sector	TAF/Ambito TAF/Teaching Field	Tipo Insegnamento Course Type	Periodo Period
510810 - ADVANCED MATHEMATICAL AND NUMERICAL METHODS FOR ENGINEERS	9				Compulsory	First Semester
Teaching unit of Advanced mathematical and numerical methods for engineers						
504434 - ADVANCED MATHEMATICAL METHODS FOR ENGINEERS	*3*	*MAT/05*	*MATH-03/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
504710 - NUMERICAL METHODS IN ENGINEERING SCIENCES	*6*	*MAT/08*	*MATH-05/A*	*Related/Supplementary/Affine/Integrativa*	*Compulsory*	*First Semester*
505018 - SATELLITE DATA ANALYSIS	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Compulsory	First Semester
508745 - INTRODUCTION TO QUANTUM MECHANICS AND QUANTUM TECHNOLOGIES	6	FIS/03	PHYS-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	First Semester
504999 - ANTENNAS AND PROPAGATION	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Compulsory	First Semester
504437 - MICROWAVES	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Compulsory	Second Semester
One course among:						
RF IDENTIFICATION AND SENSING SYSTEMS	9	ING-INF/01	IINF-01/A	Distinctive/Ingegneria elettronica	Elective	Second Semester
504439 - RF MICROELECTRONICS	9	ING-INF/02	IINF-02/A	Distinctive/Ingegneria elettronica	Elective	Second Semester
509686 - STATISTICAL SIGNAL PROCESSING	6	ING-INF/03	IINF-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	Second Semester
504998 - DIGITAL COMMUNICATIONS	6	ING-INF/03	IINF-03/A	Related/Supplementary/Affine/Integrativa	Compulsory	Second Semester

Elenco degli insegnamenti anticipabili

Anno di corso	Codice insegnamento	Denominazione insegnamento	CFU	Vecchio Settore	Nuovo Settore
2	509685	ANALOG-DIGITAL INTERFACE CIRCUITS	6	ING-INF/01	IINF-01/A
2	505015	INDUSTRIAL LASER DESIGN	6	ING-INF/01	IINF-01/A
2	510152	INTEGRATED PHOTONIC CIRCUITS	6	FIS/03	PHYS.03/A
2	505017	SATELLITE AND SPACE SYSTEMS	6	ING-INF/02	IINF-02/A
2	505006	MICROWAVE MEASUREMENTS	6	ING-INF/02	IINF-02/A
2	511769	FRONTIERS OF SPACEBORNE EARTH OBSERVATION	6	ING-INF/03	IINF-03/A

EVENTUALI ESAMI IN SOVRANNUMERO (MAX 24 CFU)

POSSIBLE EXTRA EXAMS (MAX 24 CFU)

ATTIVITÀ FORMATIVA *Courses*	**CFU** *Cfu*	**SETTORE** *Sector*	**YEAR** *Year*

Catalogo degli insegnamenti

Courses Catalogue

Data / *Date*..... Firma dello studente / *Student's signature* .....