

# Bachelor degree: Information engineering Study plan

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# Study plan:

- Organization of educational offer
- Schedule and application
- Rules
- Schemes



The course units are grouped by type of activity and, within the various activities, by disciplinary scientific sectors (SSDs)

Basic activities (SSDs: Mathematics, computer science, physics, chemistry)

Core activities in SSDs

- Electronic Engineering
- · Computer engineering
- Automation engineering
- Telecommunications engineering

Integrative activities (SSDs not included in the previous ones, e.g. Electric circuits etc.)

Other activities (not linked to an SSD: free choice 12 credits, B2 English 3 credits, final exam 3 credits)

For each activity and SSD there is a minimum and maximum number of credits that can be considered to reach the 180 credits needed for the degree.

#### NOTE:

Those who are thinking to enroll in a master's degree in Italy must meet minimum requirements in terms of credits in SSD groups.

Each Italian University and each master degree has its own admission requirements.

These requirements can be found in the admission notices.

Foreign Universities might have similar requirements for admissions.

# Graduates in Information Engineering have all the requirements to enroll in any DEI master degree

(Bioingegneria\*, Computer engineering, Electronic engineering, Control system engineering, ICT for internet and multimedia).

\* Bioingegneria is tought in Italian, so in addition you must know Italian language.



### At: https://en.didattica.unipd.it/off/2021/LT/IN/IN0513/002PD

You can find the info about all Course units

First cycle degree courses

School of Engineering

INFORMATION ENGINEERING

Degree course track Information engineering INO513/2021/002PD, A.Y. 2021/22

▼ Information on the Degree course track

Degree course

First cycle degree in
INGEGNERIA DELL'INFORMAZIONE
IN0513, Degree course structure A.Y. 2021/22

Academic Year

2021/22

→ Cou	ırse units	of the Degree course track					
Degree course code (?)	Course unit code	Course unit name	Credits	Year	Period	Lang.	Teacher in charge
IN0513	INQ1097761	CALCULUS 1	12	1st Year	First	ENG	PAOLO
		■ Details for students enrolled in A.Y. 2021/22		(2021/22)	semester		<u>GUIOTTO</u>



Information concerning the students who enrolled in A.Y. 2021/22

#### Information on the course unit

**Degree course** First cycle degree in

INFORMATION ENGINEERING (Ord. 2021)

IN0513, Degree course structure A.Y. 2021/22, A.Y. 2022/23

Degree course track <u>Information engineering [002PD]</u>

Number of ECTS credits allocated 9.0 Type of assessment Mark

Course unit English denomination PROBABILITY THEORY

Department of reference Department of Information Engineering

E-Learning website <a href="https://stem.elearning.unipd.it/course/view.php?idnumber=2022-IN0513-002PD-2021-">https://stem.elearning.unipd.it/course/view.php?idnumber=2022-IN0513-002PD-2021-</a>

INQ1097769-N0-DEI

Mandatory attendanceNoLanguage of instructionEnglishBranchPADOVA

Single Course unit The Course unit can be attended under the option Single Course unit attendance

Optional Course unit The Course unit can be chosen as Optional Course unit

Course unit for Erasmus students The course unit can be attended by Erasmus+ and other exchange students

# Teacher in charge LORENZO FINESSO lorenzo.finesso@unipd.it 00000000000

→ ECTS: details			
Туре	Scientific-Disciplinary Sector		Credits allocated
Educational activities in elective or integrative disciplines	MAT/06	Probability and Mathematical Statistics	6.0
Core courses	ING-INF/03	Telecommunications	3.0



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# Schedule and application

- It is possible to present the study plan from 23 October 2023 to 30 September 2024;
- It can be presented <u>once</u> during the year (a change during the year is possible, but only if it is justified)
- The application is made on <u>Uniweb</u> (link inside the online booklet)
- The student office collects the applications
- The Board of the Degree:
  - Prof. Marco Santagiustina (Chair)
  - Prof. Sergio Canazza Targon (Vice-chair)
  - Prof. Luca Schenato (member)

evaluates the study plan and approves it (or rejects it indicating the reason).



You can enroll in the exams only if they are in your approved study plan.

#### The general rules:

- Mandatory courses/activities 147 credits: these activities are not replaceable and they are already in your study plan
- Restricted choice courses:
  - 6 credits, 1 course out of a group of 2
  - at least 15 credits within a group of courses
- Free choice courses 12 credits: the course units chosen must be consistent with the Information Engineering training project





- For students enrolled in 2021/22 there will be 2 types of study plans:
  - Proposed Study Plan (IN0513 ENG Proposed scheme)
  - Individual Study Plan (IN0513 IND ENG Individual scheme)



# Proposed study plan: mandatory

Course Unit	CFU - CREDITS
Calculus 1	12
Foundations of computer science	12
English language B2	3 12
Linear algebra	12
Physics 1	12 9 9
Digital Systems	9
Data structures and algorithms	9
Calculus 2	9
Physics 2	9 9 9
Probability theory	9
Signal and systems	
Electric circuits	6
Introduction to machine learning	6
Electronics	9
Telecommunications	
Control Systems	9
Final exam	3



# Proposed study plan: restricted choices

#### Choices to be taken within.

#### 6 credits

#### 15 credits

CHOOSE 1 COURSE BEETWEEN THE FOLLOWING	
Information trasmission media	6
Algorithms in engineering	6

If not yet selected {

CHOOSE MINIMUM 15 CREDITS BETWEEN THE FOLLOWING COURSES	
Digital signal Processing	6
Internet and security	6
Microcontrollers and DSP	9
Introduction to computer networks	9
Information trasmission media	6
Algorithms in engineering	6



# Proposed study plan: free choices

12 credits; Choices in the list below are consistent and a study plan including them will be certainly approved.

Digital signal Processing	6
	0
Internet and security	6
Microcontrollers and DSP	9
Introduction to computer networks	9
Internet and multimedia laboratory	6
Signals and measurement Laboratory	6
Optics and Photonics laboratory	6
Microelectronics laboratory	6
Systems and models	9
Computer engineering laboratory	6
Control systems laboratory	6
	6

If not yet selected

Choices of other units (within those offered @Unipd) will be subject to Board approval.



# Individual study plan: mandatory

Course Unit	CFU - CREDITS
Calculus 1	12
Foundations of computer science	12
English language B2	3 12
Linear algebra	
Physics 1	12
Digital Systems	9
Data structures and algorithms	9
Calculus 2	9
Physics 2	9
Probability theory	9
Signal and systems	
Electric circuits	6
Introduction to machine learning	6
Electronics	9
Telecommunications	9
Control Systems	9
Final exam	3



# Proposed study plan: restricted choices

#### Choices to be taken within.

#### 6 credits

15-18 credits

CHOOSE 1 COURSE BEETWEEN THE FOLLOWING	
Information trasmission media	6
Algorithms in engineering	6

If not yet selected {

CHOOSE MINIMUM 15 CREDITS BETWEEN THE FOLLOWING COURSES	
Digital signal Processing	6
Internet and security	6
Microcontrollers and DSP	9
Introduction to computer networks	9
Information trasmission media	6
Algorithms in engineering	6



# Proposed study plan: free choices

12-15 credits; Choices in the list below are consistent and a study plan including them will be certainly approved.

Digital signal Processing	6
Internet and security	6
Microcontrollers and DSP	9
Introduction to computer networks	9
Internet and multimedia laboratory	6
Signals and measurement Laboratory	6
Optics and Photonics laboratory	6
Microelectronics laboratory	6
Systems and models	9
Computer engineering laboratory	6
Control systems laboratory	6
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If not yet selected

Choices of other units (within those offered @Unipd) will be subject to Board approval.

# Study plans

More info:

DEI student office: <a href="mailto:segredei@dei.unipd.it">segredei@dei.unipd.it</a>

https://stem.elearning.unipd.it/mod/book/view.php?id=234&chapterid=36&lang=en



# UNIVERSITÀ DEGLI STUDI DI PADOVA