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**Faculty of Engineering and Architecture**  
[https://www.unica.it/unica/it/fac\\_ingarch.page](https://www.unica.it/unica/it/fac_ingarch.page)

**Academic Year 2024/2025**

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**1. Degree Programmes A.Y. 2024/25**

In academic year 2024/25 the Faculty of Engineering and Architecture offers the following degree programmes:

<b>Bachelor's degree programmes</b> (Italian course classification)	<b>Web site</b>
Architectural Science (L-17)	<a href="https://web.unica.it/unica/it/crs_80_71.page">https://web.unica.it/unica/it/crs_80_71.page</a>
Biomedical Engineering (L-8 & L-9)	<a href="https://web.unica.it/unica/it/crs_70_75.page">https://web.unica.it/unica/it/crs_70_75.page</a>
Chemical Engineering for Innovation and Process Sustainability (L-9)	<a href="https://web.unica.it/unica/it/crs_70_77.page">https://web.unica.it/unica/it/crs_70_77.page</a>
Civil Engineering (L-7)	<a href="https://web.unica.it/unica/it/crs_70_72.page">https://web.unica.it/unica/it/crs_70_72.page</a>
Electrical Energy Engineering for Sustainable Development (L-9)	<a href="https://web.unica.it/unica/it/crs_70_92.page">https://web.unica.it/unica/it/crs_70_92.page</a>
Electronic, Computer and Telecommunication Engineering (L-8)	<a href="https://web.unica.it/unica/it/crs_70_94.page">https://web.unica.it/unica/it/crs_70_94.page</a>
Environmental and Land Engineering (L-7)	<a href="https://web.unica.it/unica/it/crs_70_73.page">https://web.unica.it/unica/it/crs_70_73.page</a>
Mechanical and Management Engineering (L-9)	<a href="https://web.unica.it/unica/it/crs_70_78.page">https://web.unica.it/unica/it/crs_70_78.page</a>
Naval Architecture and Marine Engineering (L-9)	<a href="https://web.unica.it/unica/it/crs_71_01.page">https://web.unica.it/unica/it/crs_71_01.page</a>
<b>Vocational Bachelor's degree programme</b> (Italian course classification)	<b>Web site</b>
Techniques for Building Construction and Land Development (L-P01)	<a href="https://web.unica.it/unica/it/crs_70_93.page">https://web.unica.it/unica/it/crs_70_93.page</a>
Industrial Technologies for Energy and Digital Transition (L-P03)	<a href="https://web.unica.it/unica/it/crs_70_96.page">https://web.unica.it/unica/it/crs_70_96.page</a>



<b>Master's degree programmes (Italian course classification)</b>	<b>Web site</b>
Architecture (LM-4)	<a href="https://web.unica.it/unica/it/crs_80_72.page">https://web.unica.it/unica/it/crs_80_72.page</a>
Biomedical Engineering (LM-21)	<a href="https://web.unica.it/unica/it/crs_70_99.page">https://web.unica.it/unica/it/crs_70_99.page</a>
Chemical and Biotechnological Process Engineering (LM-22)	<a href="https://web.unica.it/unica/it/crs_70_88.page">https://web.unica.it/unica/it/crs_70_88.page</a>
Civil Engineering (LM-23)	<a href="https://web.unica.it/unica/it/crs_70_80.page">https://web.unica.it/unica/it/crs_70_80.page</a>
Computer Engineering, Cybersecurity and Artificial Intelligence (LM-32)	<a href="https://web.unica.it/unica/it/crs_70_90.page">https://web.unica.it/unica/it/crs_70_90.page</a>
Electrical Engineering (LM-28)	<a href="https://web.unica.it/unica/it/crs_70_82.page">https://web.unica.it/unica/it/crs_70_82.page</a>
Electronic Engineering (LM-29)	<a href="https://web.unica.it/unica/it/crs_70_83.page">https://web.unica.it/unica/it/crs_70_83.page</a>
Energetic Engineering (LM-30)	<a href="https://web.unica.it/unica/it/crs_70_84.page">https://web.unica.it/unica/it/crs_70_84.page</a>
Environmental Engineering for Sustainable Development (LM-35)	<a href="https://web.unica.it/unica/it/crs_70_86.page">https://web.unica.it/unica/it/crs_70_86.page</a>
Internet Engineering (LM-27)	<a href="https://web.unica.it/unica/it/crs_70_91.page">https://web.unica.it/unica/it/crs_70_91.page</a>
Mechanical Engineering (LM-33)	<a href="https://web.unica.it/unica/it/crs_70_85.page">https://web.unica.it/unica/it/crs_70_85.page</a>

The School that supplies these programmes is the Faculty of Engineering and Architecture, located in the sites of [piazza d'Armi and Castello](#) in Cagliari, except for some courses that are taught in other structures of University of Cagliari.

## 2. Admission

### 2.1 BACHELOR'S DEGREES

*Minimum qualification required: Five-year high school diploma*

<b>Degree Programme (University code)</b>	<b>Test date</b>	<b>Access</b>	<b>Students admitted</b>	
			total	Foreign students
Architectural Science (80/71)	10 September 2024 <i>(at University)</i>	national restricted access	108	8
Biomedical Engineering (70/75)	30-31 July 2024 <i>(at University)</i>	local restricted access	180	5
Chemical Engineering for Innovation and Process Sustainability (70/97)	29 August 2024 <i>(at University and on-line)</i>	free access	-	15
Civil Engineering (70/72)	TOLC@CASA	free access	-	3
Electrical Energy Engineering for Sustainable Development (70/92)	30 August 2024 <i>(at University)</i>	local restricted access	180	5



Electronic, Computer and Telecommunication Engineering (70/94)	3 September 2024 (at University)	local restricted access	180	4
Environmental and Land Engineering (70/73)		free access	-	10
Mechanical and Management Engineering (70/98)		local restricted access	180	4
Naval Architecture and Marine Engineering (71/01)		local restricted access	40	4

The admission to the chosen programme, if at local restricted access, depends on the personal position in the list of candidates passing the entrance test.

More information is available (in Italian language) on the [Faculty web site](#).

All the administrative procedures to enroll are available at link <https://webstudenti.unica.it/esse3/Home.do>.

## 2.2 VOCATIONAL BACHELOR'S DEGREE PROGRAMME

*Minimum qualification required: Five-year high school diploma*

Degree Programme (University code)	Test date	Access	Students admitted	
			total	Foreign students
Techniques for Building Construction and Land Development (70/93)	30-31 July 2024 (at University) 29 August 2024 (at University and on-line TOLC@CASA)	local restricted access	35	0
Industrial Technologies for Energy and Digital Transition (70/96)	30 August 2024 (at University) 3 September 2024 (at University)	local restricted access	15+15	0

The admission to the chosen programme depends on the personal position in the list of candidates passing the entrance test.

More information is available (in Italian language) on the [Faculty web site](#).

All the administrative procedures to enroll are available at link <https://webstudenti.unica.it/esse3/Home.do>.

## 2.2 MASTER'S DEGREES

Master's Degree Programmes in Engineering and in Architecture are open access.

In any case specific curricular requirements must be satisfied and the assessment of personal proficiency and skills is required.

*Minimum qualification required: First Cycle (Bachelor's) Degree*

Degree Programme (University code)	Test date/ Assessment of personal proficiency	Access	Students admitted	
			total	Foreign students
Architecture (80/72)	9 September 2024	open access	-	4
Biomedical Engineering (70/99)	23 September 2024	open access	-	15



Chemical and Biotechnological Process Engineering (70/88)	11 September 2024	open access	-	15
Civil Engineering (70/80)	12 September 2024	open access	-	10
Computer Engineering, Cybersecurity and Artificial Intelligence (70/90)	25 September 2024	open access	-	40
Electrical Engineering (70/82)	13 September 2024	open access	-	10
Electronic Engineering (70/83)	27 September 2024	open access	-	11
Energetic Engineering (70/84)	17 September 2024	open access	-	15
Environmental Engineering for Sustainable Development (70/95)	24 September 2024	open access	-	20
Internet Engineering (70/91)	26 September 2024	open access	-	17
Mechanical Engineering (70/85)	23 September 2024	open access	-	11

The methods and schedules for assessing curricular requirements and personal proficiency and skills may vary from programme to programme. Specific information about curricular requirements, methods and dates is available in the course website from [Faculty website](#), in the academic Regulation of the Degree Programme you are interested in.

### 3. Compulsory Supplementary Education (CSE) – Bachelor degrees

#### 3.1 BACHELOR DEGREES IN ENGINEERING

A test result below the pass threshold (score < 15/50), for candidates in useful position in the list, causes assignment of compulsory supplementary education (CSE). These students can take advantage of the realignment courses available in the Faculty and on the online platform of the University. The CSE can be satisfied by passing the test in a subsequent session (score > 7/20), passing the intermediate exam in Mathematical analysis 1 or by passing the complete exam in Mathematical analysis 1, before taking any other exams.

#### 3.2 BACHELOR DEGREE IN ARCHITECTURAL SCIENCE

A test result below the pass threshold (score < 20/50), for candidates in useful position in the list, causes assignment of compulsory supplementary education (CSE). These students can take advantage of the realignment courses available in the Faculty and on the online platform of the University. The CSE can be satisfied by passing the test in a subsequent session or by passing the exam in Architectural Drawing and the exam in Integrated Course in Mathematics, before taking any other exams.

#### 3.3 VOCATIONAL BACHELOR'S DEGREES

A test result below the pass threshold (score < 9/30), for candidates in useful position in the list, causes assignment of compulsory supplementary education (CSE). These students can take advantage of the realignment courses available in the Faculty and on the online platform of the University. The CSE can be satisfied by passing the test in a subsequent session (score = > 8/20) or by passing the exam in Mathematics (Integrated course: mathematical methods and physics principles for construction and land development), before taking any other exams.



#### 4. European language level

All students must possess the European language level indicated in the table to acquire the relative credits:

Degree Programme (University code)	EU Language	European level (CEFR)	ECTS
Architectural Science (80/71)	English or other EU language*	B1	3
Biomedical Engineering (70/75)	English	B1	3
Chemical Engineering for Innovation and Process Sustainability (70/97)	English	B1	3
Civil Engineering (70/72)	English	B1	3
Electrical Energy Engineering for Sustainable Development (70/92)	English	B1	3
Electronic, Computer and Telecommunication Engineering (70/94)	English	B1	3
Environmental and Land Engineering (70/73)	English	B1	3
Mechanical and Management Engineering (70/98)	English	B1	3
Naval Architecture and Marine Engineering (71/01)	English	B2	3
Techniques for Building Construction and Land Development (70/93)	English	B1	3
Industrial Technologies for Energy and Digital Transition (70/96)	English	B1	3
Architecture (80/72)	English or other EU language*	B2	3
Biomedical Engineering (70/99)	English	B2	3
Chemical and Biotechnological Process Engineering (70/88)	English	B2	3
Civil Engineering (70/80)	English	B2	3
Electrical Engineering (70/82)	English	B2	3
Electronic Engineering (70/83)	English	B2	3
Environmental Engineering for Sustainable Development (70/95)	English	B2	3
Internet Engineering (70/91)	English	B2	3
Mechanical Engineering (70/85)	English	B2	3

\* French, Spanish, German language

#### 5. Teaching calendar and course schedule

Teaching calendar is online on Faculty web site at the menù calendars and timetable > [academic calendar](#).

**First semester:** 30/09/2024 – 20/12/2024;

**Second semester:** 03/03/2025 – 06/06/2025.

Course schedule is online on Faculty web site at the menù calendars and timetable > [course timetable](#).



## 6. Course attendance

The course attendance is mandatory.

## 7. Syllabi

Course outlines can be found on the university website at the link [Course search](#).

## 8. Exam sessions

The exam dates are 7, distributed as:

- 3 from 7<sup>th</sup> January to 1<sup>st</sup> March 2025;
- 3 from 9<sup>th</sup> June to 31<sup>st</sup> July 2025;
- 1 from 1<sup>st</sup> September to 27<sup>th</sup> September 2025.

All information about exam calendar and registration are online on the Faculty web site at the menù calendar and timetable > [exam timetable](#).

Exam schedule is also on Unica website at link [Bacheca Appelli](#).

To register to an exam on-line, go to [Esse3 \(Studenti e docenti\)](#) – Login, using your University User ID and Password.

## 9. Teaching courses a.y. 2024/2025

The teaching courses in academic year 2024/2025 are available in Annex A, for each degree programme.



**Annex A- Degree Programmes and teaching courses available in A.Y. 2024/2025**

**Bachelor degrees**

<a href="#">Civil Engineering</a>	–	L-7
<a href="#">Environmental and Land Engineering</a>	–	L-7
<a href="#">Electronic, Computer and Telecommunication Engineering</a>	–	L-8
<a href="#">Chemical Engineering for innovation and process sustainability</a>	–	L-9
<a href="#">Electrical Energy Engineering for Sustainable Development</a>	–	L-9
<a href="#">Mechanical and Management Engineering</a>	–	L-9
<a href="#">Naval Architecture and Marine Engineering</a>	–	L-9
<a href="#">Biomedical Engineering</a>	–	L-8 & L-9
<a href="#">Electrical, Electronic and Computer Engineering</a>	–	L-8 & L-9
<a href="#">Architectural Science</a>	–	L-17

**Vocational Bachelor's degree**

<a href="#">Techniques for Building Construction and Land Development</a>	–	L-P01
<a href="#">Industrial Technologies for Energy and Digital Transition</a>	–	L-P03

**Master's degrees**

<a href="#">Architecture</a>	–	LM-4
<a href="#">Biomedical Engineering</a>	–	LM-21
<a href="#">Chemical and Biotechnological Process Engineering</a>	–	LM-22
<a href="#">Civil Engineering</a>	–	LM-23
<a href="#">Internet Engineering</a>	–	LM-27
<a href="#">Electrical Engineering</a>	–	LM-28
<a href="#">Electronic Engineering</a>	–	LM-29
<a href="#">Energetic Engineering</a>	–	LM-30
<a href="#">Computer Engineering, Cybersecurity and Artificial Intelligence</a>	–	LM-32
<a href="#">Mechanical Engineering</a>	–	LM-33
<a href="#">Environmental Engineering for Sustainable Development</a>	–	LM-35

The most courses are taught in Italian language, only the courses with the English flag are taught in English language.

Only the master's degree programme in Computer Engineering, Cybersecurity and Artificial Intelligence is completely taught in English language.

**Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity



## Civil Engineering (L-7)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Vigialoro Giuseppe
1	IA/0220	Fundamentals of Computer Science	ING-INF/05	A	6	60	Fumera Giorgio
1	IN/0191	Integrated Course: Chemistry and Materials Technology and Applied Chemistry					
1	70/0001-M	- Module: Chemistry	CHIM/07	A	6	60	Serpe Angela
2	70/0085-M	- Module: Materials Technology and Applied Chemistry	ING-IND/22	C	4	40	Pia Giorgio
1	IN/0081	Integrated Course: Technical Architecture and Graphics Lab					
1	IN/0083	- Module: Graphics Lab	ICAR/17	F	4	40	Argiolas Raffaele
2	IN/0082	- Module: Technical Architecture	ICAR/10	B	6	60	Loddo Gianraffaele
2	70/0004-M	Physics 1	FIS/01	A	8	80	Modesto Leonardo
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Ratto Andrea

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Duzgun Fatma G.
1	70/0005-M	Physics 2	FIS/01	A	7	70	Corpino Riccardo
1	70/0073-M	Mechanics	MAT/07	A	6	60	Mignemi Salvatore
1	IN/0080	Decisional Methods in Economy	MAT/09	C	5	50	Zanda Simone
2	70/0080-M	Structural Mechanics/Strength of Materials	ICAR/08	B	10	100	Cazzani Antonio M.
2	70/0059-M	Hydraulics	ICAR/01	B	10	100	Balzano Andrea
2	70/0056-M	Fundamentals of Transport	ICAR/05	B	6	60	Serra Patrizia

### Third year – enrolled student a.y. 2022/23

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0048	Hydrology and Statistics	ICAR/02	B	8	80	Montaldo Nicola
1	IN/0087	Integrated Course: Topography and Topography Laboratory					
1	IN/0088	- Module: Topography	ICAR/06	B	6	60	Sanna Giovanna M.
1	IN/0089	- Module: Topography Laboratory	ICAR/06	F	4	40	Sanna Giovanna M.
1	IN/0090	Integrated Course: Applied Thermodynamics and Electrotechnics					
1	IN/0091	- Module: Applied Thermodynamics	ING-IND/11	C	5	50	Baccoli Roberto
2	IN/0092	- Module: Electrotechnics	ING-IND/31	C	4	40	Sias Giuliana



1-2	70/0084-M	Theory and Technology of Structures	ICAR/09	B	10	100	Sassu Mauro Puppio Mario Lucio
2	IN/0093	Integrated Course: Geotechnics and Construction of Road, Railways and Airport					
2	IN/0095	- Module: Construction of Road, Railways and Airport	ICAR/04	B	6	60	Maltinti Francesca
2	IN/0094	- Module: Geotechnics	ICAR/07	B	6	60	Soccodato Fabio M.
	70/0090-M	Integrated Course: Water Supply and Sewerage and Water Supply and Sewerage Lab					
2	70/0090-M1	- Module: Water Supply and Sewerage	ICAR/02	B	6	60	Viola Francesco
2	70/0090-M2	- Module: Water Supply and Sewerage Lab	ICAR/02	F	4	40	Viola Francesco

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams
	Mechanics Construction Theory	Theory and Technology of Structures
	Mechanics Construction Theory	Integrated Course: Geotechnics and Construction of Road, Railways and Airport

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Environmental and Land Engineering (L-7)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Viglaloro Giuseppe
1	70/0001-M	Chemistry	CHIM/07	A	6	60	Serpe Angela
1	IA/0220	Fundamentals of Computer Science	ING-INF/05	A	6	60	Fumera Giorgio
1	IA/0187	Engineering for Sustainable Development		F	1	25	COORDINATOR
2	70/0004-M	Physics 1	FIS/01	A	8	80	Modesto Leonardo
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Ratto Andrea
2	IN/0098	Lithology and Geology	GEO/09	C	6	60	Valera Paolo
2	70/0064-M	Graphics Lab	ICAR/17	F	6	60	Pirinu Andrea

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Duzgun Fatma G.
1	70/0005-M	Physics 2	FIS/01	A	7	70	Corpino Riccardo
1	AR/0009	Environmental Technical Physics	ING-IND/11	C	6	60	Frattolillo Andrea
1	IN/0101	Integrated Course: Science and Technology of Constructions					
1	IN/0102	- Module: Construction Theory	ICAR/08	B	8	80	Porcu Maria Cristina
2	IN/0103	- Module: Theory and Technology of Structures	ICAR/09	B	8	80	Zucca Marco Sassu Mauro
2	70/0065-M	Electrotechnics Laboratory	ING-IND/31	F	6	60	Montisci Augusto
2	70/0059-M	Hydraulics	ICAR/01	B	10	100	Balzano Andrea
2	70/0054-M	Transport Phenomena in Environmental Protection	ING-IND/24	C	6	60	Cao Giacomo

### Third year – enrolled student a.y. 2022/23

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0097	Applied Geology	GEO/05	B	6	60	Carletti Alberto
1	IA/0048	Hydrology and Statistics	ICAR/02	B	8	80	Deidda Roberto
1	IA/0172	Occupational Health and Safety	ING-IND/28	B	6	60	Dentoni Valentina



1	70/0089-M	Topography and Cartography	ICAR/06	B	6	60	Vacca Giuseppina
2	IA/0078	Environmental Pollution and Remediation Processes	ICAR/03	B	8	80	Carucci Alessandra Farru Gianluigi
2	IA/0194	Sustainable Spatial Planning	ICAR/20	B	8	80	Zoppi Corrado Leone Federica
2	IN/0099	Integrated Course: Geotechnics and Applied Seismology					
2	IN/0094	- Module: Geotechnics	ICAR/07	B	6	60	Tropeano Giuseppe
2	IN/0100	- Module: Applied Seismology	GEO/11	B	6	60	Deidda Gian Piero

**Laboratories that can be chosen by students to satisfy part of the credits of own free choice**

Sem	Code course	Laboratories	SSD	ECTS	H	Teacher
2	IN/0220	Sanitary and Environmental Engineering Laboratory	ICAR/03	2	25	Cappai Giovanna S.
2	IA/0170	Environmental Geophysics Lab	GEO/11	3	30	Deidda Gian Piero
2	IA/0001	Workshop of Regional Planning	ICAR/20	3	45	Lai Sabrina Zoppi Corrado

Other optional activities can be communicated on course web site.

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Electronic, Computer and Telecommunication Engineering (L-8)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Loi Roberto
1	70/0004-M	Physics 1	FIS/01	A	8	80	Saba Michele
1	IN/0155	Integrated Course: Information Processing Systems					
1	IA/0274	- Module: Programming Fundamentals	ING-INF/05	A	6	60	Fraschini Matteo
2	IN/0157	- Module: Computer Architectures	ING-INF/05	A	6	60	Roli Fabio Casula Roberto
2	70/0001-M	Chemistry	CHIM/07	C	6	60	Casula M. Francesca
2	70/0005-M	Physics 2	FIS/01	A	6	60	Oldeman Rudolf G.C.
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Franzoni Gregorio A.
2	IN/0005	Communication Networks	ING-INF/03	B	6	60	Martalò Marco

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Piro Stella
1	70/0069-M	Applied Mathematics	MAT/08	C	6	60	Rodriguez Giuseppe
1	70/0078-M	Digital Systems Design	ING-INF/01	B	12	120	Raffo Luigi
	70/0019-M	Integrated Course: Analysis and Control of Dynamical Systems					
1	IN/0019	- Module: System Theory	ING-INF/04	B	6	60	Seatzu Carla
2	IN/0020	- Module: Automatic Control Systems	ING-INF/04	B	6	60	Usai Elio
2	IA/0275	Circuit Theory	ING-IND/31	C	8	80	Pisano Fabio
	IA/0280	Integrated Course: Signal Measurement, Coding and Transmission					
2	IA/0281	- Module: Measurement Systems for Information Engineering	ING-INF/07	B	6	60	Pegoraro Paolo A.
2	IA/0282	- Module: Telecommunication Systems	ING-INF/03	B	6	60	Giusto Daniele
2	IA/0283	Advanced Programming	ING-INF/05	B	6	60	Didaci Luca



**Third year – enrolled student a.y. 2022/23**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
<b>Curriculum on Electronic Engineering</b>							
1	IN/0030	Semiconductor Devices	ING-INF/01	B	8	80	Cosseddu Piero
1	IA/0139	Microcontroller-Based Systems	ING-INF/01	B	6	60	Meloni Paolo
1	IA/0284	Integrated Course: Electromagnetics	ING-INF/02	B	6	60	Mazzarella Giuseppe Fanti Alessandro
	IA/0285	- Module: Radio Link Technology					
2	70/0016-M	- Module: Electromagnetic Fields	ING-INF/02	B	6	60	Mazzarella Giuseppe
2	IA/0286	Integrated Course: Electronic Systems	ING-INF/01	B	5	50	Barbaro Massimo
	IA/0287	- Module: Applied Electronics					
2	IA/0288	- Module: Circuit Design					
2	IA/0289	- Module: Lab of Electronics	ING-INF/01	F	2	20	Collu Riccardo
1	IA/0300	<i>One choice among:</i> Measurement Systems and Virtual Instrumentation	ING-INF/07	C	6	60	Sulis Sara
1	IN/0024	Power Electronics	ING-IND/32	C	6	60	Gatto Gianluca
2	IA/0141	Digital Control	ING-INF/04	C	6	60	Pisano Alessandro Giua Alessandro
<b>Curriculum on Computer Engineering</b>							
1	IA/0290	Integrated Course: Operating Systems and Database	ING-INF/05	B	5	50	Giacinto Giorgio Regano Leonardo
	IN/0108	- Module: Operating Systems					
1	IA/0291	- Module: Lab of Operating Systems					
1	IN/0031	- Module: Databases					
1	IA/0304	Radio Link Technology	ING-INF/02	B	6	60	Mazzarella Giuseppe Fanti Alessandro
1	IN/0033	Internet	ING-INF/03	B	6	60	Atzori Luigi
2	IA/0292	Integrated Course: Object-Oriented and Web Programming	ING-INF/05	B	7	70	Pintor Maura Sotgiu Angelo
	IA/0293	- Module: Web Programming					
2	IN/0028	- Module: Object Oriented Programming Languages					
1	IA/0300	<i>One choice among:</i> Measurement Systems and Virtual Instrumentation	ING-INF/07	C	6	60	Sulis Sara
2	IA/0141	Digital Control	ING-INF/04	C	6	60	Pisano Alessandro Giua Alessandro
2	IA/0302	Smart Grid	ING-IND/33	C	6	60	Mocci Susanna



<b>Curriculum on Internet</b>							
1	IN/0033	Internet	ING-INF/03	B	6	60	Atzori Luigi
	IA/0294	Integrated Course: Digital Media and Mobile Networks					
1	IA/0126	- Module: Digital Media	ING-INF/03	B	6	60	Floris Alessandro
1	IA/0295	- Module: Lab of Digital Media	ING-INF/03	F	2	20	Marcello Francesca
2	IA/0296	- Module: XG Mobile Networks	ING-INF/03	B	6	60	Murroni Maurizio
	IA/0297	Integrated Course: Electromagnetics for Telecommunication					
1	IA/0303	- Module: Radio Link Technology	ING-INF/02	B	6	60	Mazzarella Giuseppe Fanti Alessandro
2	IA/0298	- Module: Electromagnetics and Antenna Technologies	ING-INF/02	B	6	60	Mazzarella Giuseppe
2	IA/0299	Cloud networking	ING-INF/03	B	6	60	<i>da definire</i>
		<i>One choice among:</i>					
1	IA/0300	Measurement Systems and Virtual Instrumentation	ING-INF/07	C	6	60	Sulis Sara
2	IA/0141	Digital Control	ING-INF/04	C	6	60	Pisano Alessandro Giua Alessandro
2	IA/0302	Smart Grid	ING-IND/33	C	6	60	Mocci Susanna

### Elecitives activities

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
<b>Curriculum on Electronic Engineering and Curriculum on Internet</b>							
1	IA/0471	Databases	ING-INF/05	D	6	60	Giacinto Giorgio
	IA/0465	Integrated Course: Operating Systems and Lab					
1	IA/0466	- Module: Operating Systems	ING-INF/05	D	5	50	Giacinto Giorgio Regano Leonardo
1	IA/0467	- Module: Lab of Operating Systems	ING-INF/05	D	2	20	Regano Leonardo
2	IA/0472	Object Oriented Programming Languages	ING-INF/05	D	6	60	Demontis Ambra
2	IA/0473	Web Programming	ING-INF/05	D	7	70	Pintor Maura Sotgiu Angelo
<b>Curriculum on Electronic Engineering and Curriculum on Computer Engineering</b>							
	IA/0468	Integrated Course: Digital Media e Lab					
1	IA/0469	- Module: Digital media	ING-INF/03	D	6	60	Floris Alessandro
1	IA/0470	- Module: Lab of Digital Media	ING-INF/03	D	2	20	Marcello Francesca
2	IA/0296	xG Mobile Networks	ING-INF/03	D	6	60	Murroni Maurizio
<b>Curriculum on Computer Engineering and Curriculum on Internet</b>							
	IA/0461	Integrated Course: Applied Electronics and Lab					
2	IA/0462	- Module: Applied Electronics	ING-INF/01	D	5	50	Barbaro Massimo
2	IA/0463	- Module: Lab of Electronics	ING-INF/01	D	2	20	Collu Riccardo
2	IA/0464	Circuit Design	ING-INF/01	D	5	50	Barbaro Massimo



**Activities rules**

<b>Academic Year Enrolment</b>	<b>If you do not pass:</b>	<b>You cannot take:</b>
2024/25	Physics 1	Physics 2
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Chemical Engineering for Innovation and Process Sustainability (L-9)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Vigialoro Giuseppe
1	IA/0171	Chemistry 1	CHIM/07	A	9	90	Pilia Luca
2	70/0004-M	Physics 1	FIS/01	A	8	80	Modesto Leonardo
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Arrai Francesco
2	70/0017-M	Chemistry 2	CHIM/07	A	6	60	Delogu Francesco
<b>Curriculum Renewable resources</b>							
1	IA/0051	Chemistry Laboratory	CHIM/07	F	3	30	Pilia Luca
2	IA/0336	Elements of Chemical Engineering of Renewable Sources	ING-IND/24	F	3	30	Desogus Francesco
<b>Curriculum Materials</b>							
1	IA/0337	Introduction to Materials Science	ING-IND/22	F	3	30	Meloni Paola
2	IA/0338	Laboratory of Materials Science	ING-IND/22	F	3	30	Meloni Paola
<b>Curriculum Food Engineering</b>							
1	IA/0051	Chemistry Laboratory	CHIM/07	F	3	30	Pilia Luca
2	IA/0339	Elements of Food Engineering	ING-IND/24	F	3	30	Desogus Francesco

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Duzgun Fatma G.
1	70/0005-M	Physics 2	FIS/01	A	7	70	Corpino Riccardo
1	70/0069-M	Integrated Course: Numerical Analysis and Applications to Chemical Engineering - Module: Applied Mathematics	MAT/08	A	6	60	Fermo Luisa
2	IA/0335	- Module: Process Engineering Calculations	ING-IND/26	B	6	60	Leonzio Grazia
2	IA/0348	Transport Phenomena	ING-IND/24	B	6	60	Locci Antonio M.
2	70/0063-M	Chemical Reaction Engineering	ING-IND/24	B	6	60	Lai Nicola
2	IA/0347	Thermodynamics	ING-IND/24	B	9	90	Locci Antonio M.
<b>Curriculum Renewable resources and Curriculum Food Engineering</b>							
1	70/0072-M	Fluid Mechanics	ICAR/01	C	9	90	Ferrari Simone
<b>Curriculum Materials</b>							
1	IA/0340	Basic Solid Mechanics	ICAR/08	C	6	60	Morini Lorenzo



**Third year – enrolled student a.y. 2022/23 (Chemical Engineering)**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/0069-M	Applied Mathematics	MAT/08	A	6	60	Fermo Luisa
1	IN/0102	Construction Theory	ICAR/08	C	6	60	Brun Michele
1	IA/0227	Sustainable Energy Technologies and Systems	ING-IND/09	B	9	90	Cocco Daniele
1-2	70/0087-M	Applied Chemistry and Technology	ING-IND/22	B	12	120	Licheri Roberta
2	70/0060-M	Chemical Plant Design	ING-IND/25	B	9	90	Vacca Annalisa Mais Laura
2	70/0063-M	Chemical Reaction Engineering	ING-IND/24	B	9	90	Lai Nicola Desogus Francesco
2	70/0083-M	Instrumentation and Control	ING-IND/26	B	9	90	Baratti Roberto

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Electrical Energy Engineering for Sustainable Development (L-9)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Iannizzotto Antonio
1	70/0001-M	Chemistry	CHIM/07	A	6	60	Vacca Annalisa
1	70/0004-M	Physics 1	FIS/01	A	8	80	Concas Giorgio
2	70/0005-M	Physics 2	FIS/01	A	7	70	Filippetti Alessio
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Zuddas Fabio
	IA/0451	Integrated course: Fundamentals of Digital Technologies					
2	IA/0220	- Module: Fundamentals of Computer Science	ING-INF/05	A	6	60	Didaci Luca
2	IN/0005	- Module: Communication Networks	ING-INF/03	C	6	60	Martalò Marco

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Piro Stella
1-2	IA/0223	Fundamentals on automatic control	ING-INF/04	B	9	90	Usai Elio Franceschelli Mauro
1-2	70/0053-M	Electrotechnics	ING-IND/31	B	12	120	Fanni Alessandra
	IA/0225	Integrated course: Fundamentals of Energy Sustainability					
1	IN/0091	- Module: Applied Thermodynamics	ING-IND/11	B	6	60	Baccoli Roberto
2	IA/0226	- Module: Principles of Sustainable Mobility	ICAR/05	C	5	50	Serra Patrizia
2	IA/0224	Measurements and Instrumentation	ING-INF/07	B	6	60	Muscas Carlo
		<i>One choice among:</i>					
1	IA/0234	Machine learning and data mining	ING-INF/05	C	6	60	Putzu Lorenzo
2	IN/0225	Materials Technology	ING-IND/22	C	6	60	Pia Giorgio
	IA/0235	Integrated course: IoT Platforms					
2	IA/0236	- Module: Hardware Platforms for IoT	ING-INF/01	C	3	30	Palumbo Francesca
2	IA/0237	- Module: Data Processing and Transmission	ING-INF/03	C	3	30	Pilloni Virginia



**Third year – enrolled student a.y. 2022/23**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IN/0026	Measurements on Power Systems	ING-INF/07	B	6	60	Sulis Sara
1	IN/0024	Power Electronics	ING-IND/32	B	6	60	Gatto Gianluca
1	IA/0227	Sustainable Energy Technologies and Systems	ING-IND/09	B	9	90	Cocco Daniele
1	IA/0232	Integrated Course: Smart Power Systems for Energy Transition	ING-IND/33	B	5	50	Pilo Fabrizio G.L. Pisano Giuditta
	IN/0025	- Module: Fundamentals of Electric Power Systems					
2	IA/0233	- Module: Smart Grid For Electric Power Distribution	ING-IND/33	B	5	50	Pilo Fabrizio G.L. Mocci Susanna
1	IA/0231	Integrated Course: Conversion Devices for Sustainable Energy	ING-IND/32	B	5	50	Floris Andrea
	IN/0006	- Module: Electrical Machines					
2	IN/0007	- Module: Electrical Drives	ING-IND/32	B	5	50	Serpi Alessandro
2	IA/0228	Integrated Course: Sustainable Energy Development	ING-IND/33	B	5	50	Pilo Fabrizio G.L. Ghani Emilio
	IA/0229	- Module: Energy: Markets and Regulation					
2	IA/0230	- Module: Energy: Markets and Regulation	ING-IND/32	B	5	50	Damiano Alfonso

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2024/25	Physics 1	Physics 2
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Mechanical and Management Engineering (L-9)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Mutzu Martis Massimiliano
1	70/0001-M	Chemistry	CHIM/07	A	6	60	Vacca Annalisa
1	70/0004-M	Physics 1	FIS/01	A	8	80	Mura A. Andrea
2	70/0005-M	Physics 2	FIS/01	A	7	70	D'Appollonio Giuseppe
2	IA/0220	Fundamentals of Computer Science	ING-INF/05	A	6	60	Didaci Luca
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Arrai Francesco
2	IN/0225	Materials Technology	ING-IND/22	C	6	60	Pia Giorgio

### Second year – enrolled student a.y. 2023/24

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Marras Monica
1	70/0050-M	Technical Drawing	ING-IND/15	B	9	90	Ambu Rita
	IN/0090	Integrated course: Applied Thermodynamics and Electrotechnics					
1	IN/0091	- Module: Applied Thermodynamics	ING-IND/11	C	6	60	Baccoli Roberto
1	70/0053-M	- Module: Electrotechnics	ING-IND/31	C	6	60	Cannas Barbara
2	70/0086-M	Manufacturing Technology	ING-IND/16	B	9	90	El Mehtedi Mohamad

#### **Curriculum Mechanical Engineering**

2	70/0072-M	Fluid Mechanics	ICAR/01	C	6	60	Querzoli Giorgio
2	IN/0102	Construction Theory	ICAR/08	C	9	90	Carta Giorgio

#### **Curriculum Management Engineering**

	IA/0328	Integrated course: Essentials of Economics and Business Economics					
2	IA/0329	- Module: Essentials of Economics	SECS-P/06	C	3	30	Usai Stefano Deiana Claudio
2	IA/0330	- Module: Essentials of Business Economics	SECS-P/07	C	3	30	Spano Alessandro
2	IA/0324	Principles of mechanical design	ING-IND/14	C	9	90	Loi Gabriela Aymerich Francesco



**Third year – enrolled student a.y. 2022/23 (Mechanical Engineering)**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/0066-M	Fluid Machinery	ING-IND/08	B	9	90	Puddu Pierpaolo
1	70/0070-M	Applied Mechanics	ING-IND/13	B	9	90	Ruggiu Maurizio
1	IN/0104	Integrated Course: Machine Components Design					
1	IN/0105	- Module: Fundamentals of Machine Design	ING-IND/14	B	6	60	Leban Bruno
2	IN/0106	- Module: Machine Elements	ING-IND/14	B	6	60	Baldi Antonio
2	IN/0234	Industrial Plans	ING-IND/17	B	9	90	Pilloni M. Teresa
2	IA/0007	Measurements in Fluid Machines	ING-IND/08	B	6	60	Cambuli Francesco
2	70/0082-M	Energy Systems	ING-IND/09	B	9	90	Tola Vittorio

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2024/25	Physics 1	Physics 2
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Naval Architecture and Marine Engineering (L-9)

**OLBIA**

*available only the first year*

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Columbu Alessandro
1	70/0001-M	Chemistry	CHIM/07	A	6	60	Delogu Francesco
1	70/0004-M	Physics 1	FIS/01	A	8	80	Colombo Luciano
2	70/0005-M	Physics 2	FIS/01	A	7	70	Corpino Riccardo
2	IA/0220	Fundamentals of Computer Science	ING-INF/05	A	6	60	Marcialis Gian Luca
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Columbu Alessandro
2	IN/0225	Materials Technology	ING-IND/22	C	6	60	Pia Giorgio



## Biomedical Engineering (L-8 & L-9)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0186	Mathematical Analysis 1	MAT/05	A	9	90	Iannizzotto Antonio
1	70/0001-M	Chemistry	CHIM/07	A	6	60	Vacca Annalisa
1	70/0004-M	Physics 1	FIS/01	A	8	80	Concas Giorgio
1	IN/0155	Integrated Course: Information Processing Systems					
1	IN/0156	- Module: Fundamentals of Computer Science	ING-INF/05	A	6	60	Marcialis Gian Luca
2	IN/0157	- Module: Computer Architectures	ING-INF/05	A	6	60	Fraschini Matteo Orrù Giulia
2	70/0005-M	Physics 2	FIS/01	A	7	70	Filippetti Alessio
2	IN/0079	Geometry and Algebra	MAT/03	A	7	70	Zuddas Fabio
2	IA/0065	Integrated Course: Human Body Biology					
2	IN/0038	- Module: Human Anatomy	BIO/16	C	4	40	Maxia Cristina
2	IN/0012	- Module: Biochemistry	BIO/10	C	2	20	Floris Sonia
2	IN/0039	- Module: Fundamentals of Physiology	BIO/09	C	3	30	Melis Melania

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0188	Mathematical Analysis 2	MAT/05	A	8	80	Frassu Silvia
1	IN/0236	Integrated Course: Fundamentals of Mechanics and Biomaterials					
1	IN/0165	- Module: Fundamentals of Mechanics and Biomechanics	ING-IND/14	B	5	50	Leban Bruno
1	IN/0237	- Module: Biomaterials	ING-IND/24	B	5	50	Orrù Roberto
1	70/0069-M	Applied Mathematics	MAT/08	A	6	60	Fermo Luisa
1	IA/0067	Integrated Course: Biochemical Engineering					
1	IA/0068	- Module: Fundamentals of Biochemical Engineering	ING-IND/24	B	5	50	Lai Nicola
2	IA/0069	- Module: Applications of Biochemical Engineering	ING-IND/24	B	5	50	Cincotti Alberto
2	IN/0034	Integrated Course: Fundamentals of Information Engineering					
2	IN/0035	- Module: Fundamentals of Systems Theory	ING-INF/04	B	5	50	Giua Alessandro
2	IN/0036	- Module: Electronical Signal Processing	ING-INF/06	B	5	50	Pani Danilo
2	IN/0215	Integrated Course: Electronic Design					
2	IN/0216	- Module: Analog Electronics	ING-INF/01	B	5	50	Barbaro Massimo Palumbo Francesca
2	IN/0217	- Module: Digital Electronics	ING-INF/01	B	5	50	Barbaro Massimo Raffo Luigi



2	IA/0377	Lab of Matlab Fundamentals for Bioengineers	ING-INF/06	F	2	20	Sedda Giulia
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**Third year – enrolled student a.y. 2022/23**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/0014-M	Electric Actuators and Converters	ING-IND/32	B	5	50	Gatto Gianluca
1	IN/0212	Integrated Course: Bioelectronics					
1	IN/0213	- Module: Bioelectronics Fundamentals	ING-INF/06	B	5	50	Lai Stefano
1	IN/0214	- Module: Bioelectronic Interfaces	ING-INF/06	B	5	50	Lai Stefano
1	IA/0188	Integrated Course: Mechanical Bioengineering					
1	IA/0188-1	- Module: Strength of Materials	ING-IND/14	B	5	50	Porta Micaela
1	IA/0188-2	- Module: Design of Medical Devices with Structural Functions	ING-IND/34	B	5	50	Pau Massimiliano
1	IN/0040	Integrated Course: Fundamentals of Clinic and Pathology					
1	IN/0041	- Module: Pathology	MED/08	C	2	20	Ambu Rossano
2	IN/0042	- Module: Internal Medicine	MED/09	C	2	20	Barcellona Doris
2	IN/0044	- Module: Radiology and Nuclear Medicine	MED/36	C	2	20	Saba Luca
2	IA/0148	- Module: Technologies and Instruments in Surgery	MED/18	C	2	20	Restivo Angelo
2	IA/0189	<i>choose between:</i> Applied Biomechanics	ING-IND/34	B	5	50	Arippa Federico
2	IN/0218	Medical Instrumentation	ING-INF/06	B	5	50	Pani Danilo
1	IA/0191	<i>choose among:</i> Technologies and Numerical Techniques for Clinical Image Processing	ING-INF/02	C	5	50	Fanti Alessandro Scapaticci Rosa
2	IN/0048	Electromagnetic Compatibility	ING-INF/02	C	5	50	Fanti Alessandro Mazzarella Giuseppe
2	IN/0049	Power and Electrical Safety in Hospital	ING-IND/33	C	5	50	Pisano Giuditta
2	IA/0190	Data Acquisition Systems	ING-INF/07	C	5	50	Castello Paolo

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2024/25	Physics 1	Physics 2
	I. C.: Human Body Biology	Chemistry
2023/24	Mathematical Analysis 1 Geometry and Algebra Physics 1	All 2nd year exams
	I. C.: Fundamentals of Mechanics and Biomaterials	Chemistry
2022/23	Mathematical Analysis 2 Physics 2	All 3rd year exams

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Architectural Science (L-17)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0050	Architectural Drawing and Representation	ICAR/17	A	8	80	Bagnolo Vincenzo
1	AR/0020	Integrated Course in Mathematics					
	AR/0022	- Module: Geometry	MAT/03	A	5	50	Ratto Andrea
2	AR/0021	- Module: Mathematical Analysis	MAT/05	A	5	50	Rosati Giacomo
1	IA/0388	Integrated Course in Foundations of Architecture					
	IA/0390	- Module: Elements of Architectural Design	ICAR/14	C	3	30	Moro Marco
1	IA/0389	- Module: History of 20th Century Architecture	ICAR/18	A	5	50	Schirru Marcello
2	IA/0391	- Module: Constructive and Distributive Features of Buildings	ICAR/10	C	3	30	Mocci Silvia Cadoni Stefano
2	IA/0392	- Module: Digital Representation Techniques for Architecture	ICAR/17	C	3	30	Argiolas Raffaele
1	IA/0384	Integrated Laboratory of Architectural Design 1					
	IA/0385	- Module: Architectural and Urban Design 1	ICAR/14	B	10	100	Peghin Giorgio M. (course A) Cocco Giovanni B. (course B) Loddo Gianraffaele (course A)
2	IA/0386	- Module: Architecture Technologies 1	ICAR/10	B	5	50	Sanjust Paolo Achenza M. Maddalena (course B)
1-2	IA/0387	History of Ancient, Medieval and Renaissance architecture	ICAR/18	A	8	80	Cadinu Marco
2	IA/0393	Urban and Territorial Geography	M-GGR/02	C	4	40	Memoli Maurizio

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0394	History of Architecture of the Modern Age	ICAR/18	A	5	50	Schirru Marcello
1	IA/0395	Survey and Representation of Architecture and Environment	ICAR/17	A	7	70	Pirinu Andrea
	IA/0396	Integrated Laboratory of Architectural Design 2					
1	IA/0397	- Module: Architectural and Urban Design 2	ICAR/14	B	10	100	Lecis Marco (course A) Cherchi P. Francesco (course B)
2	IA/0398	- Module: Architecture Technologies 2	ICAR/10	B	5	50	Cadoni Stefano



1-2	AR/0008	Structural Mechanics/Strength of Materials and Statics	ICAR/08	B	11	110	Reccia Emanuele Cazzani Antonio M.
2	AR/0009	Environmental Technical Physics	ING-IND/11	A	8	80	Ricciu Roberto Frattolillo Andrea
2	80/040	Fundamentals of Urban Planning	ICAR/20	B	5	50	Colavitti Anna Maria

**Third year – enrolled student a.y. 2022/23**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0003	Geodesign	ICAR/20	B	5	50	Campagna Michele
1	80/044	Building Production Processes and Methods	ICAR/11	C	5	50	Quaquero Emanuela
1	80/046	Theory and History of Restoration	ICAR/19	B	7	70	Giannattasio Caterina Pintus Valentina
1	AR/0030	Integrated Laboratory of Design and Construction of Architecture 3	ICAR/14	B	10	100	Faiferri Massimo Pusceddu Fabrizio (course A) Atzeni Carlo (course B)
	AR/0031	- Module: Architectural Design 3					
2	AR/0032	- Module: Technological Design of Architecture 3	ICAR/10	B	5	50	Marras Francesco
2	IA/0058	Real Estate Appraisal	ICAR/22	B	5	50	Blecic Ivan
2	AR/0002	Structural Design and Analysis	ICAR/09	B	6	60	Mistretta Fausto
2	IA/0161	Urban Planning	ICAR/20	B	5	50	Serra Sergio

**Activities rules**

Academic Year Enrolment	If you do not pass:	You cannot take:
2023/24	Architectural Drawing and Representation	Survey and Representation of Architecture and Environment
	Integrated Course in Mathematics	Structural Mechanics/Strength of Materials and Statics
	History of Ancient, Medieval and Renaissance architecture	History of Architecture of the Modern Age
2022/23	Structural Mechanics/Strength of Materials	Structural Design and Analysis
	History of Architecture 2	Theory and History of Restoration

All rules are available in the course educational regulation of the year corresponding to your first year of enrolment.



## Techniques for Building Construction and Land Development (L-P01)

First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0249	Fundamentals of Computer Science, Data Analysis and Statistics	ING-INF/05	A	6	48	Fraschini Matteo Didaci Luca
1	IA/0241	Digital Representation Techniques	ICAR/17	B	6	48	Pirinu Andrea
	IA/0238	Integrated course: Mathematical Methods and Physics Principles for Construction and Land Development					
1	IA/0240	- Module: Physics	FIS/01	A	3	24	Concas Giorgio
1	IA/0239	- Module: Mathematics	MAT/05	A	3	24	Piro Stella
	IA/0253	Integrated course: Digitalization, BIM and Construction Management					
1	IA/0254	- Module: Digitalization and BIM	ICAR/11	B	4	32	Congiu Eleonora
1	IA/0255	- Module: Management	ICAR/22	B	3	24	Saiu Valeria Blecic Ivan
	IA/0245	Integrated course: Building Construction and Restoration					
1	IA/0246	- Module: Architectural Engineering	ICAR/10	B	5	40	Achenza M.Maddalena Desogus Giuseppe Marras Francesco
2	IA/0247	- Module: Architectural design	ICAR/14	B	3	24	Pusceddu Fabrizio Faiferri Massimo
2	IA/0248	- Module: Restoration	ICAR/19	C	3	24	Fiorino Donatella R. Pilia Elisa
	IA/0242	Integrated course: Principles of Structural Mechanics and Design					
2	IA/0243	- Module: Structural Mechanics	ICAR/08	B	3	24	Reccia Emanuele
2	IA/0244	- Module: Structural Design	ICAR/09	B	3	24	Valdes Monica
	IA/0250	Integrated course: Geomatics Techniques for Construction and Land Development					
2	IA/0251	- Module: Building construction	ICAR/06	B	3	24	Vecchi Enrica
2	IA/0252	- Module: Land development	ICAR/06	B	3	24	Vecchi Enrica
2	IA/0256	Building Lab		F	10	120	Congiu Eleonora Saiu Valeria Mura Emanuele



**Second year – enrolled student a.y. 2023/24**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0257	Integrated course: Hydraulic Infrastructures					
1	IA/0259	- Module: Water Engineering	ICAR/02	B	2	16	Saba Andrea
1	IA/0258	- Module: Hydraulics	ICAR/01	B	2	16	Seoni Alessandro
	IA/0260	Integrated course: Spatial Planning and Infrastructures					
1	IA/0262	- Module: Tools for the Acquisition and Monitoring of Transport Data	ICAR/05	B	2	16	Piras Francesco
1	IA/0379	- Module: Road Construction	ICAR/04	B	2	16	Portas Silvia
1	IA/0263	- Module: Digital Tools for Urban Planning	ICAR/20	B	5	40	Garau Chiara Lai Sabrina
1	IA/0265	Investigation, Diagnosis and Monitoring of Constructions Lab		F	10	120	Armas Cristiano Rombi James Valdes Monica
1	IA/0172	Occupational Health and Safety	ING-IND/28	C	6	60	Dentoni Valentina
	IA/0267	Integrated course: Spatial Planning Legislation and Valuation					
1	IA/0378	- Module: Spatial Planning Legislation	IUS/10	B	3	24	Piras Paola
2	IA/0268	- Module: Valuation	ICAR/22	B	3	24	Saiu Valeria
2	IA/0266	Management of Excavation Materials and Construction and Demolition Waste	ICAR/03	B	2	16	Muntoni Aldo
2	IA/0271	Construction Site Lab		F	10	120	Vecchi Enrica Pinna Francesco Cigagna Marco Piccinini Antonio
2	IA/0270	Spatial Planning and Infrastructures Lab		F	10	120	Ladu Mara Seoni Alessandro Vincis Antonio

**Third year – enrolled student a.y. 2022/23**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1-2	IA/0272	Summary Lab		F	8	96	Pilia Elisa Blecic Ivan Desogus Giuseppe Garau Chiara Lai Sabrina Pinna Francesco Pusceddu Fabrizio
1-2	IA/0273	Internship		F	48	1200	



## Industrial Technologies for Energy and Digital Transition (L-P03)

*available only the first and the second years*

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0249	Fundamentals of Computer Science, Data Analysis and Statistics	ING-INF/05	A	6	48	Fraschini Matteo Didaci Luca
	IA/0404	Integrated Course: Principles of Mathematics and Physics					
1	IA/0406	- Module: Physics	FIS/01	A	3	24	Concas Giorgio
1	IA/0405	- Module: Mathematics	MAT/05	A	3	24	Piro Stella
	IA/0408	Integrated Course: Measurements and industrial automation					
1	IA/0409	- Module: Elements of measurement theory and industrial instrumentation	ING-INF/07	B	6	48	Muscas Carlo Castello Paolo
1	IA/0410	- Module: Basics on control systems	ING-INF/04	B	6	48	Pilloni Alessandro
1	IA/0411	Fundamentals of applied thermodynamics	ING-IND/11	C	4	32	Baccoli Roberto
2	IA/0412	Fundamentals of technical drawing and CAD for industrial applications	ING-IND/15	B	6	48	Ambu Rita
<b>Electrical Curriculum</b>							
	IA/0413	Integrated Course: Industrial Electrotechnics					
1	IA/0414	- Module: Fundamentals of Electrotechnics	ING-IND/31	B	4	32	Pisano Fabio
1	IA/0415	- Modulo: Applications of Electrotechnics	ING-IND/31	B	2	16	Pisano Fabio
2	IA/0417	Industrial electrical components and installations	ING-IND/33	B	5	40	Ghiani Emilio Pisano Giuditta
2	IA/0416	Electrical and electronic devices for energy conversion	ING-IND/32	B	5	40	Gatto Gianluca
	IA/0418	Integrated Course: IoT technologies and devices for industrial applications					
2	IA/0419	- Module: IoT protocols and virtualization	ING-INF/03	C	3	24	Marche Claudio
2	IA/0420	- Module: Radiolink in industrial environments	ING-INF/02	C	3	24	Muntoni Giacomo
2	IA/0421	- Module: Microcontroller-based platforms	ING-INF/01	C	2	16	Scrugli Matteo A.



<b>Mechanical Curriculum</b>							
1	IA/0414	Fundamentals of Electrotechnics	ING-IND/31	C	4	32	Pisano Fabio
2	IA/0422	Integrated Course: Fluid machinery and energy systems					
2	IA/0423	- Module: Fundamentals of fluid machinery	ING-IND/08	B	4	32	Cambuli Francesco Licheri Fabio
2	IA/0424	- Module: Fundamentals of energy systems	ING-IND/09	B	4	32	Marchionni Matteo
2	IA/0426	Fundamentals of Industrial Processes	ING-IND/24	B	6	48	Cao Giacomo
2	IA/0425	Civil and industrial mechanical systems	ING-IND/17	B	6	48	Orrù Pier Francesco

**Second year – enrolled student a.y. 2023/24**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IA/0427	Computer Integrated Manufacturing Systems Laboratory		F	12	120	Manca Emanuele Lai Remo
<b>Electrical Curriculum</b>							
1	IA/0428	Technologies for Static Energy Conversion and Electric Drives	ING-IND/32	B	6	48	Kumar Amit
1	IA/0429	Industrial electrical components and installations	ING-IND/33	B	6	48	Mocci Susanna
1	IA/0430	Laboratory of Static Converters for Industrial Applications		F	12	120	Brandinu Paolo Grivel Giovanni M.
2	IA/0431	Electrical and building automation design laboratory		F	12	120	Loggia Angelo
2	IA/0432	Laboratory of Electrical and Electronic Technologies for Industrial Applications		F	12	120	Porru Mario Brandinu Paolo
<b>Mechanical Curriculum</b>							
1	IA/0434	Laboratory of heat and cooling systems		F	6	60	Possidente Raffaello
1	IA/0433	Laboratory of fluid machinery and systems for renewable energy		F	12	120	Licheri Fabio Petrollese Mario
1	IA/0435	Laboratory of materials and technologies for industrial applications		F	6	60	Carta Mauro
2	IA/0436	Laboratory of mechanical systems engineering		F	8	80	Pireddu Ezio
2	IA/0437	Laboratory of mechanical systems		F	8	80	Orrù Pier Francesco
2	IA/0441	Laboratory of renewable energy for civil and industrial applications		F	8	80	Aresu Giuseppe



## Architecture (LM-4)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
	80/052	Integrated Course: History of Contemporary Art and Architecture					
1	80/052-1	- Module: History of Contemporary Architecture	ICAR/18	B	5	50	Mais Stefano
1	80/052/2	- Module: History of Contemporary Art	L-ART/03	C	3	30	Salis Mauro
	AR/0010	Integrated Laboratory of Survey and Restoration					
1	AR/0010-1	- Module: Survey	ICAR/17	B	5	50	Bagnolo Vincenzo
2	AR/0010-2	- Module: Restoration	ICAR/19	B	5	50	Fiorino Donatella
	IA/0079	Integrated Course: Architectural and Urban Theory and Design Studio					
1	IA/0079-1	- Module: Theory and Design	ICAR/14	B	6	60	Chiri Giovanni M. Dessi Adriano
2	IA/0079-2	- Module: Design	ICAR/14	B	6	60	Chiri Giovanni M.
	IA/0080	Integrated Laboratory of Technological Design					
2	IA/0080-1	- Module: BIM	ICAR/11	C	3	30	Quaquero Emanuela
2	IA/0080-2	- Module: Structural design	ICAR/09	B	5	50	Fenu Luigi Sedda Francesco
2	IA/0080-3	- Module: Innovative Technologies for Architecture	ICAR/10	B	5	50	Atzeni Carlo
2	IA/0080-4	- Module: Building thermophysics	ING-IND/11	B	5	50	Ricciu Roberto
		<i>One choice among:</i>					
1	IA/0403	Museum Exhibit Design	ICAR/13	C	4	40	Sanjust Paolo
1	IA/0160	Environmental and Architectural Psychology	M-PSI/05	C	4	40	Fornara Ferdinando
2	IA/0157	Film Aesthetics	L-ART/06	C	4	40	Floris Antioco
2	IA/0081	Public Space and Mobility	ICAR/04	C	4	40	Pinna Francesco



**Second year – enrolled student a.y. 2023/24**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
	IA/0200	Integrated Course: Urban Planning, Evaluation and Social Research					
1	IA/0201	- Module: Urban Planning	ICAR/20	B	5	50	Colavitti Anna Maria
1	IA/0202	- Module: Social Research	SPS/10	B	5	50	Cois Ester
1	IA/0203	- Module: Evaluation of Plans, Projects and Public Policy	ICAR/22	B	5	50	Blecic Ivan
		<i>One choice among:</i>					
1	IA/0086	Landscape Architecture	ICAR/15	C	4	40	Dessi Adriano
1	IA/0084	Sustainable Materials and Technologies for Architecture	ING-IND/22	C	4	40	Meloni Paola
2	IA/0085	Interior Design	ICAR/16	C	4	40	Chiri Giovanni M.
2	IA/0159	Non-Destructive Testing of Artefacts and Structures	GEO/11	C	4	40	Vignoli Giulio
<b>Curriculum Architecture, City and Landscape</b>							
1	IA/0088	Social and Landscape Geography	M-GGR/02	C	4	40	Memoli Maurizio
		<i>choose between:</i>					
1	IA/0082	Accessibility for Public and Urban Spaces	ICAR/04	C	4	40	Pinna Francesco
1	IA/0383	Geomatics for Landscape Analysis and Representation	ICAR/06	C	4	40	Vacca Giuseppina
2	IA/0179	Architectural Design: Theory and Criticism	ICAR/14	C	3	30	Lecis Marco
	IA/0309	Integrated Laboratory of Architecture, City and Landscape Design Studio					
2	IA/0310	-Module: Architectural and Urban Design	ICAR/14	B	5	50	Peghin Giorgio M.
2	IA/0311	-Module: Landscape	ICAR/15	C	5	50	Dessi Adriano
		<i>choose between:</i>					
2	IA/0093	Architectural Representation and Visual Communication	ICAR/17	C	4	40	Bagnolo Vincenzo
2	IA/0089	History of City and Landscape Development	ICAR/18	C	4	40	Cadinu Marco



<b>Curriculum Historical Architecture and Design</b>							
1	IA/0312	Integrated Course: Architectural Heritage and Public Space					
1	IA/0314	- Module: Restoration	ICAR/19	C	2	20	Giannattasio Caterina
1	IA/0313	- Module: History of Architecture	ICAR/18	C	2	20	Cadinu Marco
		<i>choose between:</i>					
1	IA/0097	Recovery of Traditional Architecture in Historical Town Centres	ICAR/10	C	4	40	Mocci Silvia
2	IA/0098	Recovery of Modern Architecture	ICAR/10	C	4	40	Sanjust Paolo
		<i>Choose between:</i>					
1	IA/0100	Restoration Site	ICAR/19	C	4	40	Pilia Elisa Fiorino Donatella
1	IA/0101	Protection of Historical Landscapes	ICAR/19	C	4	40	Pintus Valentina
2	IA/0096	Structural Analysis of Historical Architectures	ICAR/08	C	3	30	Reccia Emanuele
	IA/0094	Integrated Laboratory of Architecture and Restoration Design Studio					
2	IA/0305	- Module: Architectural and Urban Design	ICAR/14	B	5	50	Cocco G. Battista
2	IA/0306	- Module: Restoration	ICAR/19	B	5	50	Giannattasio Caterina
<b>Curriculum Architecture, Building and Sustainability</b>							
1	IA/0105	Structural Architecture	ICAR/09	C	4	40	Fenu Luigi
		<i>Choose between:</i>					
1	IA/0103	Earthen Architecture. Building Cultures and Sustainable Development	ICAR/10	C	4	40	Achenza M. Maddalena
1	IA/0199	Wood Architectures	ICAR/10	C	4	40	Atzeni Carlo
		<i>One choice among:</i>					
1	IA/0106	Sustainable Energy in Building Systems	ING-IND/11	C	4	40	Ricciu Roberto
1	IA/0107	Climate Control Strategies within Heritage Buildings	ING-IND/11	C	4	40	Frattolillo Andrea
1	IA/0108	Urban Micro-Climatology	ICAR/01	C	4	40	Ferrari Simone
	IA/0102	Integrated Laboratory of Sustainable Architecture Design Studio					
2	IA/0307	- Module: Technical Architecture	ICAR/10	B	5	50	Achenza Maddalena
2	IA/0308	- Module: Architectural and Urban Design	ICAR/14	B	5	50	Cherchi P. Francesco
2	IA/0109	Safety and Project Management at Construction Sites	ING-IND/28	C	3	30	Dentoni Valentina



**Biomedical Engineering**  
**Inter-university programme with UNIPavia and IUSS Pavia**

*available only the first year*

**First year – enrolled student a.y. 2024/25 (sede Cagliari)**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IA/0475	Advanced Biomedical Signal Processing	ING-INF/06	B	6	55	Pani Danilo
1	IA/0476	Integrated Course: Digital Phenotyping					
1	IA/0477	- Module: Bioengineering of the Motor System	ING-IND/34	B	6	45	Pau Massimiliano
1	IA/0478	- Module: Digital Biomarkers and Processing Techniques	ING-INF/06	B	6	53	Baldazzi Giulia
1	IA/0479	Integrated Course: Numerical and Statistical Methods for Bioengineering					
1	IA/0480	- Module: Statistical Methods for Bioengineering	ING-IND/26	C	3	30	Grosso Massimiliano
1	IA/0481	- Module: Numerical Methods for Bioengineering	MAT/08	C	6	45	Rodriguez Giuseppe
1	IA/0483	Ethics and Law of Digital Healthcare	IUS/20	F	3	24	Farina Massimo
2	IA/0482	Multimodal Bioimaging ( <i>Streaming</i> )	ING-INF/06	B	6	50	Magenes Giovanni
<b>Curriculum Electronic and Information Engineering</b>							
2	IA/0484	Electronic Systems for Precision Medicine	ING-INF/01	C	9	90	Raffo Luigi Collu Riccardo
2	IA/0485	Microwave Imaging Technologies	ING-INF/02	C	6	45	Fanti Alessandro Scapatucci Rosa
1	IA/0491/EN	Cybersecurity	ING-INF/05	C	6	60	Giacinto Giorgio Fumera Giorgio
2	IA/0488	Nanotechnology for Diagnostic and Therapeutic Applications	CHIM/07	C	6	60	Casula M. Francesca
2	IA/0489	Virtual Reality and Neurorehabilitation Models	ING-INF/06	C	6	55	Sedda Giulia
2	IA/0490	Management of Investment Projects in the Health Sector	ING-IND/35	C	6	45	Morea Donato
2	IA/0492	Materials and Devices for Innovative Sensors	ING-INF/06	C	6	45	Spanu Andrea
2	IA/0493	Fabrication Technologies for Biosensing	ING-INF/06	C	6	60	Viola Fabrizio A.
2	IA/0494	Radiofrequency Technologies for Therapeutic Treatments	ING-INF/02	C	6	45	Fanti Alessandro Lodi Matteo Bruno



<b>Curriculum Industrial Bioengineering</b>							
2	IA/0486	Bioengineering of Tissue-Organ Systems and Artificial Organs	ING-IND/24	C	6	60	Lai Nicola Traversari Gabriele
2	IA/0487	Clinical Applications of Personalized Medicine	ING-IND/34	B	9	68	Leban Bruno Pau Massimiliano Cocco Eleonora Marongiu Giuseppe
2	IA/0488	<i>One choice among:</i> Nanotechnology for Diagnostic and Therapeutic Applications	CHIM/07	C	6	60	Casula M. Francesca
2	IA/0495	Risk Assessment and Management in Healthcare Facilities	ING-IND/33	C	6	50	Pisano Giuditta Pilo Fabrizio G. L.
2	IA/0496	Power Electronics for Medical Devices	ING-IND/32	C	6	60	Gatto Gianluca Kumar Amit
2	IA/0497	Ergonomics for Health Care	ING-IND/34	C	6	45	Porta Micaela
2	IA/0489	Virtual Reality and Neurorehabilitation Models	ING-INF/06	C	6	55	Sedda Giulia
2	IA/0490	Management of Investment Projects in the Health Sector	ING-IND/35	C	6	45	Morea Donato
	IA/0498	Integrated Course: Materials Technology and Computational Methods					
2	IA/0500	- Module: Computational Methods	ICAR/08	C	3	30	Morini Lorenzo
2	IA/0499	- Module: Materials Technology	ING-IND/22	C	3	30	Licheri Roberta

**Other optional activities**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
2	IA/0513	Radiological Integration in Healthcare Processes	MED/36	D	3	24	Cau Riccardo







## Chemical and Biotechnological Process Engineering (LM-22)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0154	Applied Statistics for Industrial Engineering	ING-IND/26	B	9	90	Grosso Massimiliano
1	70/LM-0072	Principles of Chemical Engineering and Processes	ING-IND/24	B	9	90	Orrù Roberto
2	IA/0044	Integrated Course: Industrial and Energetic Processes					
2	IA/0045	Module: Industrial Processes	ING-IND/27	B	6	60	Mais Laura
2	IA/0277	Module: Hydrogen Technology and Fuel Cells	ING-IND/27	B	6	60	Mascia Michele
2	70/LM-0078	Environmental Conscious Energy and Chemical Processes	ING-IND/25	B	9	90	Mascia Michele


### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0240/EN	Process Modeling and Simulation 	ING-IND/26	B	9	90	Baratti Roberto Tronci Stefania
1	IA/0187/EN	Chemical and Biological Reactors 	ING-IND/24	B	9	90	Cincotti Alberto
1	IA/0188/EN	Safety and environmental chemical engineering with design project 	ING-IND/25	B	12	120	Concas Alessandro
2	IN/0241/EN	Advanced Systems of Process Control 	ING-IND/26	B	9	90	Tronci Stefania

### enrolled student a.y. 2024/25 and 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1-2		Courses from Table 1		C	18		


Table 1. Three courses among:

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0039	Fundamentals of Machine Design	ING-IND/14	C	6		Leban Bruno
1	IA/0033	Industrial Energy Technologies	ING-IND/09	C	6		Cau Giorgio
1	IN/0158	Biochemistry	BIO/10	C	6		Fais Antonella
1	13174	Project Management	SECS-P/08	C	6		Dessi Cinzia
1	IN/0091	Applied Thermodynamics	ING-IND/11	C	6		Baccoli Roberto
2	IA/0301/EN	Surface Forces and Adsorption 	CHIM/02	C	6		Parsons Drew F.
2	IN/0233	Chemistry and Technology of Food	CHIM/10	C	6		Corrias Francesco Atzei Alessandro
2	2487	Microbiology	MED/07	C	6		De Logu Alessandro



**Civil Engineering (LM-23)**

**First year – enrolled student a.y. 2024/25**


Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0003	Geodesign	ICAR/20	C	6	60	Campagna Michele
1	IA/0211	Integrated Course: Theory and Computational mechanics of structures					
1	IA/0181	- Module: Theory of Structures	ICAR/08	B	6	60	Spagnuolo Mario
2	IA/0209/EN	- Modulo: Computational mechanics of structures 	ICAR/08	B	6	60	Eremeev Victor
1	IN/0141	Integrated Course: Construction of Road, Railways and Airport 2 and Transportation Planning					
1	IN/0142	- Module: Construction of Road, Railways and Airport 2	ICAR/04	B	6	60	Coni Mauro
2	IN/0143	- Module: Transportation Planning	ICAR/05	B	6	60	Meloni Italo
<b>Curriculum Hydraulics</b>							
1	IA/0070	Numerical Calculus	MAT/08	C	6	60	Buccini Alessandro
2	IN/0144	Integrated Course: Hydraulics 2 and Maritime Hydraulics					
2	IN/0145	- Module: Hydraulics 2	ICAR/01	B	6	60	Badas Maria Grazia
2	IN/0146	- Module: Maritime Hydraulics	ICAR/01	B	6	60	Badas Maria Grazia
<b>Curriculum Sustainable Smart Building and Constructions</b>							
1	70/LM-0066	Mathematical Models and Methods in Engineering	MAT/09	C	6	60	Gorgone Enrico
2	IA/0119	Sustainable Building: Bioclimatic Design	ICAR/10	B	6	60	Desogus Giuseppe Achenza M. Maddalena
2	IN/0124	<i>One choice among:</i> Thermal HVAC Systems	ING-IND/11	C	6	60	Mastino Costantino C.
2	IA/0058	Real Estate Appraisal	ICAR/22	C	6	60	Blecic Ivan
2	IA/0120	Sustainable Spatial Planning	ICAR/20	C	6	60	Balletto Ginevra
<b>Curriculum Structures</b>							
1	IA/0070	Numerical Calculus	MAT/08	C	6	60	Buccini Alessandro
2	IN/0194	Theory and Design of Steel Construction	ICAR/09	B	6	60	Fenu Luigi
<b>Curriculum Transportations</b>							
1	70/LM-0066	Mathematical Models and Methods in Engineering	MAT/09	C	6	60	Gorgone Enrico
2	IA/0381	Integrated Course: Transport System Design and Theory and Technology Traffic Flow					
2	IA/0382	- Module: Transport System Design	ICAR/05	B	6	60	Fancello Gianfranco
2	IA/0380	- Module: Theory and Technique of Road Traffic Flow	ICAR/05	B	6	60	Olivo Alessandro



**Second year – enrolled student a.y. 2023/24**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0040	Foundations and Earth Retaining Structure	ICAR/07	C	6	60	Soccodato Fabio M.
1	70/LM-0077	Watershed and Stream Restoration Engineering	ICAR/02	B	6	60	Montaldo Nicola
1	IA/0210	Integrated Course: Design, Control and Inspection of Structures and Buildings in Wood and Masonry					
1	IA/0182	- Module: Design, Monitoring and Inspection of Structures	ICAR/09	B	6	60	Stochino Flavio
2	IA/0184	- Module: Design of Timber and Masonry Structures	ICAR/09	B	6	60	Concu Giovanna
<b>Curriculum Hydraulics</b>							
1	IN/0189	Hydrological Models	ICAR/02	B	6	60	Deidda Roberto
2	IN/0190	Water Systems Planning and Management	ICAR/02	B	6	60	Cristiano Elena
2	IA/0062	Maritime Engineering	ICAR/02	B	6	60	Ruju Andrea
<b>Curriculum Sustainable Smart Building and Constructions</b>							
1	IA/0212	<i>One choice among:</i> Urban Microclimatic Design and Natural Building Ventilation	ICAR/01	B	6	60	Ferrari Simone
1	IA/0121	Hydraulic services design	ICAR/02	B	6	60	Saba Andrea
1	IA/0122	Structural diagnosis and reinforcement of buildings	ICAR/09	B	6	60	Sassu Mauro Puppio Mario Lucio
2	IA/0147	Integrated Course: Sustainable building					
2	IA/0147-1	- Module: Energy performance of building	ING-IND/11	C	6	60	Frattolillo Andrea
2	IA/0147-2	- Module: Building Information Modeling: from knowledge to integrated design	ICAR/11	B	6	60	Quaquero Emanuela
2	IA/0146	Integrated building design lab - Sustainable building		F	3	40	Quaquero Emanuela



Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
<b>Curriculum Structures</b>							
1	IA/0186/EN	Structural stability and limit analysis of structures 	ICAR/08	B	6	60	Eremeev Victor
1	IA/0214	Integrated Course: Dynamics of Structures and Seismic Engineering					
1	IN/0055	- Module: Dynamics of structures	ICAR/08	B	6	60	Porcu Maria Cristina
2	IA/0215	- Module: Seismic Engineering	ICAR/09	B	6	60	Stochino Flavio
2	IA/0185	Design of Bridges and Special Structures	ICAR/09	B	6	60	Mistretta Fausto
<b>Curriculum Transportations</b>							
2	70/LM-0095	Road, Airfield and Railway Pavements	ICAR/04	B	6	60	Coni Mauro
2	70/LM-0105	Logistic and Freight Transportation	ICAR/05	B	6	60	Fancello Gianfranco
		<i>choose between:</i>					
2	70/LM-0106	Urban and Metropolitan Transport	ICAR/05	B	6	60	Sottile Eleonora
2	70/LM-0104	Rail Transport	ICAR/05	B	6	60	Olivo Alessandro




**Other optional activities**

Sem	Code course	Laboratories	SSD	TAF	ECTS	H	Teacher
1	IN/0154	Traffic Simulation Model Laboratory	ICAR/05	F	3	45	Piras Francesco
1	IN/0152	Structures Finite Element Modeling	ICAR/09	F	3	45	Sassu Mauro
2	IA/0064	Laboratory of Maritime Hydrodynamics Modelling	ICAR/01	F	3	45	Balzano Andrea
2	IA/0529	Workshop on Assisted Road Design and Reconstruction of Road Accidents	ICAR/04	F	3	45	Maltinti Francesca Rassu Nicoletta
2	IN/0222	Watershed and Stream Restoration Engineering Laboratory	ICAR/02	F	3	45	Viola Francesco
2	IA/0528/EN	Continuum Mechanics	ICAR/08	F	3	30	Seppecher Pierre






## Internet Engineering (LM-27)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0359	Integrated Course: Computer Technologies and Law					
1	IA/0205/EN	- Modulo: Artificial intelligence 	ING-INF/05	C	6	60	Fumera Giorgio Demontis Ambra
1	IA/0217	- Module: Legal Computer Science	IUS/20	C	5	50	Farina Massimo
1	IA/0358	Integrated Course: Access Technologies and Coding					
1	IA/0076	- Module: Codes	ING-INF/03	B	6	60	Giusto Daniele
2	IA/0018	- Module: Access Networks	ING-INF/03	B	6	60	Murroni Maurizio
1	IA/0360	Integrated Course: Secure and Programmable Networks					
1	IA/0218/EN	- Module: Network security 	ING-INF/03	C	4	40	Martalò Marco
2	IA/0361	- Module: Programmable Networks	ING-INF/03	B	6	60	Atzori Luigi
2	IA/0219	- Module: Network security lab	ING-INF/03	F	2	20	Martalò Marco
1	IA/0362	Integrated Course: Wireless Systems					
1	IA/0363	- Module: Wireless Devices Design	ING-INF/02	B	5	50	Casula G. Andrea Mazzarella Giuseppe Lodi Matteo Bruno
2	IA/0136	- Module: Pervasive wireless systems	ING-INF/02	B	5	50	
2	IA/0134/EN	Stochastic models 	ING-INF/04	C	5	50	Pilloni Alessandro
2	IA/0364	Product management		F	2	20	Giusto Daniele

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0367/EN	Internet of things and digital twins 	ING-INF/03	B	6	60	Nitti Michele
1	IA/0125/EN	<i>Choose between:</i> Advanced embedded systems 	ING-INF/01	C	8	80	Meloni Paolo
1	IA/0365	Corso integrato: Physical-layer techniques for Wireless communication security and applications					
1	IA/0122/EN	- Module: Physical-layer techniques for Wireless communication security 	ING-INF/02	C	6	60	Mazzarella Giuseppe Lodi Matteo Bruno
2	IA/0366	- Module: Radio Security in Automotive	ING-INF/02	C	2	20	<i>to be defined</i>
2	IA/0116/EN	Cybersecurity Technologies and Risk Management	ING-INF/05	C	8	80	Giacinto Giorgio Fumera Giorgio Maiorca Davide
		Courses from Table 1 or 2					



**Table 1. Transmission and systems**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IA/0368	Integrated Communications and Sensing	ING-INF/02	B	6	60	Mazzarella Giuseppe Lodi Matteo Bruno
1	IA/0369	Radio Systems Laboratory	ING-INF/02	F	2	20	Casula G. Andrea
2	IA/0370	Wireless Networks Planning	ING-INF/03	B	6	60	Anedda Matteo
2	IA/0371	MIMO wireless systems	ING-INF/02	C	6	60	Casula G. Andrea

**Table 2. Services and applications**

Sem	Codice Ins.	Insegnamento	SSD	TAF	CFU	Ore	Docente
1	IA/0373	Smart housing and smart cities	ING-INF/03	B	6	60	Pilloni Virginia
2	IA/0372	ML for Communications and Networks	ING-INF/03	B	6	60	Nitti Michele
2	IA/0374	Metaverse	ING-INF/03	C	6	60	Porcu Simone
2	IA/0375	Service deployment Laboratory	ING-INF/03	F	2	20	Marche Claudio

**Other optional activities**

Sem	Code course	Laboratories	SSD	TAF	ECTS	H	Teacher
2	IA/0030	iOS Programming	ING-INF/03	F	2	20	Giusto Daniele
2	IA/0208	Project management and team working	ING-INF/03	F	4	40	Atzori Luigi
2	IA/0366	Radio Security in Automotive	ING-INF/02	F	2	20	<i>da definire</i>



## Electrical Engineering (LM-28)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0064	Measurements for Electric Energy	ING-INF/07	B	9	90	Muscas Carlo Sulis Sara
1	IA/0172	Occupational Health and Safety	ING-IND/28	C	6	60	Dentoni Valentina
	IN/0115	Integrated Course: Power Systems: Analysis, Dynamics and Stability					
1	IN/0116	- Module: Power Systems Analysis and Control	ING-IND/33	B	6	60	Celli Gianni
2	IN/0117	- Module: Power Systems Dynamics and Stability	ING-IND/33	B	6	60	Celli Gianni
	IN/0125	Integrated Course: Electrical Energy Management and Electrical Vehicles					
1	IN/0127	- Module: Electrical Vehicles	ING-IND/32	B	5	50	Porru Mario
2	IN/0126	- Module: Electrical Energy Management	ING-IND/32	B	5	50	Damiano Alfonso
2	70/LM-0003	Analysis and Control of MIMO Systems	ING-INF/04	C	6	60	Usai Elio



### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0052	Power Systems Generation and Economics	ING-IND/33	B	9	90	Ghiani Emilio Pilo Fabrizio G.L.
1	70/LM-0032	Applied Electromagnetism in Electrical and Energy Engineering	ING-IND/31	B	9	90	Sias Giuliana
	IA/0113	Integrated Course: Design of Signal Processing Systems					
2	IA/0114	- Module: Design of Signal Processing Circuits	ING-IND/31	B	6	60	Cannas Barbara
2	IA/0139/EN	- Modulo: Data driven models for system engineering	ING-IND/31	B	6	60	Montisci Augusto
	IA/0008	Integrated Course: Electric Energy Conversion and Propulsion Systems					
2	IA/0009	- Module: Static Electric Energy Conversion and Electromagnetic Compatibility	ING-IND/32	B	6	60	Gatto Gianluca Paramasivam Santhosh
2	IA/0010	- Module: Electric Drives and Propulsion Systems	ING-IND/32	B	6	60	Serpi Alessandro





## Electronic Engineering (LM-29)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0174	Integrated Course: Electronic Systems and Components					
1	IA/0143	- Module: Reliability of Electronic Components	ING-INF/01	B	5	50	Mura Giovanna
1	IA/0515	- Modulo: Design of Integrated Systems	ING-INF/01	B	6	60	Busia Paola Leone Gianluca
1	IN/0200	Integrated Course: Integrated Circuits					
1	IN/0201	- Module: Digital Integrated Circuits	ING-INF/01	B	5	50	Barbaro Massimo
1	IN/0202	- Module: Analog Integrated Circuits	ING-INF/01	B	5	50	Barbaro Massimo
2	70/LM-0088	Automatic Measurement Systems	ING-INF/07	B	6	60	Pegoraro Paolo A.
2	IA/0516	Integrated Course: Pervasive electromagnetics					
2	IA/0136	- Module: Pervasive wireless systems	ING-INF/02	B	5	50	Mazzarella Giuseppe Lodi Matteo Bruno
2	IA/0145	- Module: Radio-Frequency Planar Circuits	ING-INF/02	B	5	50	Montisci Giorgio
2	IA/0173	Integrated Course: Control and Wireless Communication Systems					
2	IA/0140	- Module: Wireless Networks Access Technologies	ING-INF/03	C	3	30	Murroni Maurizio
2	IA/0141	- Module: Digital Control	ING-INF/04	C	3	30	Pisano Alessandro Giua Alessandro
<b>Curriculum Embedded Electronics</b>							
2	IA/0013/EN	Machine learning 	ING-INF/05	C	7	70	Biggio Battista Roli Fabio
<b>Curriculum Electronic Technologies for Emerging Applications</b>							
2	IA/0154/EN	Nanoelectronics 	FIS/03	C	5	50	Melis Claudio

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0146/EN	Mixed-Signal Circuits and Systems 	ING-INF/01	B	6	60	Leone Gianluca Ratto Francesco
<b>Curriculum Embedded Electronics </b>							
1	IA/0125/EN	Advanced Embedded Systems	ING-INF/01	B	8	80	Meloni Paolo
1	IA/0205/EN	Artificial Intelligence	ING-INF/05	C	6	60	Fumera Giorgio Demontis Ambra



1	IA/0020/EN	Internet of Things	ING-INF/03	C	6	60	Nitti Michele
2	IA/0147/EN	Analysis and Control of Cyber-Physical Systems	ING-INF/04	C	6	60	Giua Alessandro
2	IA/0148/EN	Cyber-Physical System Architectures	ING-INF/01	B	5	50	Palumbo Francesca Barbaro Massimo Ratto Francesco
<b>Curriculum Electronic Technologies for Emerging Applications</b>							
1	IA/0153/EN	Data Acquisition Technologies	ING-INF/07	B	6	60	Castello Paolo
1	IA/0149/EN	Optoelectronics, Diagnostics and Aerospace Applications	ING-INF/01	B	7	70	Mura Giovanna
1	IA/0151/EN	Wearable and Flexible Electronics	ING-INF/01	B	7	70	Cosseddu Piero Mascia Antonello
1	IA/0189/EN	Microwave systems and sensors	ING-INF/02	B	7	70	Montisci Giorgio
2	IA/0152/EN	Biosensors and Bioelectronics	ING-INF/06	C	6	60	Lai Stefano



## Energetic Engineering (LM-30)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0032	Applied Electromagnetism in Electrical and Energy Engineering	ING-IND/31	C	6	60	Sias Giuliana
1	70/LM-0038	Nuclear Reactor Physics	FIS/04	C	6	60	Cicalò Corrado
	IN/0122	Integrated Course: Energetics and Thermal Hvac Systems					
1	IN/0123	- Module: Energetics	ING-IND/11	B	6	60	Baccoli Roberto
2	IN/0124	- Module: Thermal Hvac Systems	ING-IND/11	B	6	60	Mastino Costantino C.
2	70/LM-0043	Exploration Geophysics	GEO/11	C	6	60	Vignoli Giulio
		<i>3 courses among:</i>					
1	70/LM-0010	Automatic Control Systems	ING-INF/04	C	6	60	Pisano Alessandro
1	IN/0033	Internet	ING-INF/03	C	6	60	Atzori Luigi
1	IA/0278	Electrical Machines and Drives	ING-IND/32	C	6	60	Serpi Alessandro
2	IA/0040	Environmental Impact Energy Systems	ING-IND/09	C	6	60	Tola Vittorio
2	IA/0376	Building Energy Performance	ING-IND/11	C	6	60	Frattolillo Andrea
2	IA/0302	Smart Grid	ING-IND/33	C	6	60	Mocci Susanna
2	IN/0143	Transportation Planning	ICAR/05	C	6	60	Meloni Italo
2	IA/0277	Hydrogen Technology and Fuel Cells	ING-IND/27	C	6	60	Mascia Michele

### Second year – enrolled student a.y. 2023/24


Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	70/LM-0052	Power Systems Generation and Economics	ING-IND/33	B	9	90	Ghiani Emilio Pilo Fabrizio G.L.
	IN/0125	Integrated Course: Electrical Energy Management and Electrical Vehicles					
1	IN/0127	- Module: Electrical Vehicles	ING-IND/32	B	5	50	Porru Mario
2	IN/0126	- Module: Electrical Energy Management	ING-IND/32	B	5	50	Damiano Alfonso
	IA/0032	Integrated Course: Renewable and Industrial Energy Technologies					
1	IA/0276	- Module: Advanced Energy Systems	ING-IND/09	B	6	60	Cau Giorgio
2	70/LM-0098	- Module: Renewable Energy Technologies	ING-IND/09	B	6	60	Cocco Daniele
2	IA/0034	EMC and Power Electronic Energy Conversion	ING-IND/32	B	6	60	Gatto Gianluca Paramasivam Santhosh



**Other available activities**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0037	Electric Drives for Electric Propulsion Lab	ING-IND/32	F	3	30	Serpi Alessandro
1	IN/0154	Traffic Simulation Model Laboratory	ICAR/05	F	3	45	Piras Francesco
1	IN/0131	Modeling and Simulation of Energy Systems	ING-IND/09	F	3	30	Petrollese Mario
1	13174	Project Management	SECS-P/08	F	4	36	Dessì Cinzia
1	IA/0279	Technologies for Energy Efficiency	ING-IND/09	F	3	30	Petrollese Mario
2	IA/0175	Control of Energy Systems	ING-INF/04	F	3	30	Pisano Alessandro
2	IA/0035	Electrical Energy Management Systems Lab	ING-IND/32	F	2	20	Damiano Alfonso
2	IA/0043	Smart Grid Lab	ING-IND/33	F	2	20	Pisano Giuditta



**Computer Engineering, Cybersecurity and Artificial Intelligence  
(LM-32) **

**First year – enrolled student a.y. 2024/25**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0113/EN	Industrial Software Development	ING-INF/05	B	7	70	Biggio Battista Regano Leonardo Sotgiu Angelo
1	IA/0116/EN	Cybersecurity Technologies and Risk Management	ING-INF/05	B	8	80	Giacinto Giorgio Fumera Giorgio Maiorca Davide
1	IA/0115/EN	Supervisory control and monitoring	ING-INF/04	B	9	90	Seatzu Carla Usai Elio Mahulea Cristian F.
1	IA/0281/EN	Corso integrato: Network and application security					
	IA/0218/EN	- Module: Network security	ING-INF/03	C	4	40	Martalò Marco
2	IA/0127/EN	- Module: Web security and malware analysis	ING-INF/05	B	6	60	Maiorca Davide
1	IA/0114/EN	Integrated Course: Intelligent Systems					
	IA/0205/EN	- Module: Artificial Intelligence	ING-INF/05	B	6	60	Fumera Giorgio Demontis Ambra
2	IA/0013/EN	- Module: Machine Learning	ING-INF/05	B	7	70	Biggio Battista Roli Fabio
2	IA/0514/EN	Computer vision technologies and biometrics	ING-INF/05	B	6	60	Marcialis Gian Luca
2	IA/0117/EN	Fault diagnosis and estimation in dynamical systems	ING-INF/04	B	5	50	Franceschelli Mauro

**Second year – enrolled student a.y. 2023/24**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
	IA/0124/EN	Integrated Course: Embedded Systems					
1	IA/0125/EN	- Module: Advanced Embedded Systems	ING-INF/01	C	8	80	Meloni Paolo
1	IA/0020/EN	- Module: Internet of Things	ING-INF/03	C	6	60	Nitti Michele
	IA/0281/EN	Integrated Course: Network and application security					
1	IA/0218/EN	- Module: Network security	ING-INF/03	C	4	40	Martalò Marco
2	IA/0127/EN	- Module: Web Security and Malware Analysis	ING-INF/05	B	6	60	Maiorca Davide
	IA/0128/EN	Integrated Course: Computer Forensics					
2	IA/0129/EN	- Module: Computer Forensics Techniques	ING-INF/05	B	5	50	Maiorca Davide
2	IA/0130/EN	- Module: Computer Law	IUS/20	C	5	50	Farina Massimo



		<i>one choice among:</i>					
1	IA/0207/EN	Machine learning security	ING-INF/05	B	5	50	Biggio Battista Roli Fabio
2	IA/0140/EN	Networked control systems and security	ING-INF/04	B	5	50	Franceschelli Mauro
2	IA/0134/EN	Stochastic Models	ING-INF/04	B	5	50	Pilloni Alessandro

**enrolled student a.y. 2024/25 and 2023/24**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1-2		Courses from Table 1		C	6		

**Table 1. One course among:**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
<b>1<sup>st</sup> year</b>							
	IA/0118/EN	Integrated Course: Smart Grid and Critical Infrastructures					
2	IA/0119/EN	- Module: Industrial Informatics for energy storage systems	ING-IND/32	C	2	20	Porru Mario
2	IA/0120/EN	- Module: Critical infrastructures for innovative power distribution	ING-IND/33	C	2	20	Pisano Giuditta
2	IA/0121/EN	- Module: Measurements and Cybersecurity for Smart Grid	ING-INF/07	C	2	20	Pegoraro Paolo A.
2	IA/0139/EN	Data driven models for system engineering	ING-IND/31	C	6	60	Montisci Augusto
<b>2<sup>nd</sup> year</b>							
1	IA/0122/EN	Physical-layer techniques for Wireless communication security	ING-INF/02	C	6	60	Mazzarella Giuseppe Lodi Matteo Bruno



## Mechanical Engineering (LM-33)

### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0227	Mechanics of Materials	ING-IND/14	B	6	60	Aymerich Francesco
1	70/LM-0090	Manufacturing Systems	ING-IND/16	B	6	60	Buonadonna Pasquale
1	IA/0072	Integrated Course: Industrial Systems - Module: Industrial Production Systems Management	ING-IND/17	B	6	60	Pilloni Maria Teresa
2	IA/0327						
2	IA/0216	Mechatronics	ING-IND/13	B	9	90	Rea Pierluigi
1	70/LM-0056	<i>Taf B Course to choose</i> Finite Elements Analysis	ING-IND/14	B	6	60	Bertolino Filippo
2	IA/0176	Maintenance Management for Industrial Systems	ING-IND/17	B	6	60	Arena Simone
2	IN/0065	Mechanics of Composite Materials	ING-IND/14	B	6	60	Aymerich Francesco
2	IA/0204	Industrial Robotics	ING-IND/13	B	6	60	Rea Pierluigi Ruggiu Maurizio
2	70/LM-0098	Renewable Energy Technologies	ING-IND/09	B	6	60	Cocco Daniele
1	70/LM-0010	<i>Taf C Course to chose</i> Automatic Control Systems	ING-INF/04	C	6	60	Pisano Alessandro
1	IA/0070	Numerical Calculus	MAT/08	C	6	60	Fermo Luisa
2	IN/0124	Thermal HVAC Systems	ING-IND/11	C	6	60	Mastino Costantino C.
2	IA/0205	Economic and Management Engineering	ING-IND/35	C	6	60	Morea Donato

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher	
1	IA/0033	Industrial Energy Technologies	ING-IND/09	B	9	90	Cau Giorgio Petrollese Mario	
2	IA/0039	Design of Fluid Machinery	ING-IND/08	B	9	90	Ghisu Tiziano Puddu Pierpaolo	
1	IA/0150	<i>Taf B Course to chose</i> Management of Energy Processes	ING-IND/09	B	6	60	Migliari Luca	
1	IN/0129		Industrial Quality Management	ING-IND/16	B	6	60	El Methedi Mohamad
1	IN/0228		Experimental Mechanics	ING-IND/14	B	6	60	Baldi Antonio
1	IN/0064		Computational Modeling of Fluid Systems	ING-IND/08	B	6	60	Ghisu Tiziano
2	IA/0040		Environmental Impact Energy Systems	ING-IND/09	B	6	60	Tola Vittorio
2	70/LM-0096		Experimentation in Fluid Machines	ING-IND/08	B	6	60	Cambuli Francesco
1	13174	<i>Taf C Course to chose</i> Project management	SECS-P/08	C	6	36	Dessì Cinzia	
1	2582	Business Organization	SECS-P/10	C	6	36	Pinna Roberta	
1	IA/0278	Electrical Machines and Drives	ING-IND/32	C	6	60	Serpi Alessandro	
2	IA/0206	Advanced Theory of Structures	ICAR/08	C	6	60	Brun Michele	



**Other available activities**

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IN/0131	Modeling and Simulation of Energy Systems	ING-IND/09	F	3	30	Petrollese Mario
2	IA/0177	Introduction to Structural Dynamics	ING-IND/14	F	3	30	Bertolino Filippo
2	IN/0229	Mechanical Design Project	ICAR/08	F	3	30	Carta Giorgio



## Environmental Engineering for Sustainable Development (LM-35)






### First year – enrolled student a.y. 2024/25

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
1	IA/0155	Numerical Computing: Methods, Models and Algorithm	MAT/08	C	6	60	Fermo Luisa
1	IA/0156	Scientific Computing Workshop	MAT/08	F	3	30	Pes Federica
1	70/LM-0044	Environmental Geoengineering	ING-IND/28	B	6	60	Grosso Battista
1	IA/0530	Environmental Fluid Mechanics	ICAR/01	B	6	60	Querzoli Giorgio
1	IN/0133	Integrated Course: Remediation and Chemical-Physical Treatment of Soils					
1	IN/0135	- Module: Chemical-Physical Treatment of Soils	ING-IND/29	B	6	60	Tilocca M. Caterina
2	IN/0134	- Module: Contaminated Sites Remediation	ICAR/03	B	6	60	Muntoni Aldo
2	IA/0315	Geodesign Lab	ICAR/20	F	3	50	Campagna Michele
2	70/LM-0042	Applied Geophysics	GEO/11	B	6	60	Deidda Gian Piero
2	70/LM-0050	Hydrogeology	GEO/05	B	6	60	Carletti Alberto
2	IN/0132	Impact Assessment and Environmental Rehabilitation	ING-IND/28	B	6	60	Massacci Giorgio

### Second year – enrolled student a.y. 2023/24

Sem	Code course	Teaching course	SSD	TAF	ECTS	H	Teacher
		<i>one choice among:</i>					
1	70/LM-0040	Foundations and Earth Retaining Structures	ICAR/07	C	6	60	Soccodato Fabio M.
1	IA/0316	Remote Sensing for Environment Monitoring and Modelling	ICAR/06	C	6	60	Vacca Giuseppina
1	IN/0193	Recovery of Secondary Raw Materials	ING-IND/29	C	6	60	Surracco Marco
1	IA/0317	Urban and Regional Sustainability: Smart Cities and Ecosystem Services in Planning	ICAR/20	C	6	60	Garau Chiara Lai Sabrina
2	70/LM-0007	Geochemical Characterization	GEO/09	C	6	60	Valera Paolo
2	IA/0318	Green and Applied Chemistry	CHIM/07	C	6	60	Serpe Angela
2	IA/0042	Design of Environmental Remediation and Decontamination Systems	ICAR/03	C	6	60	De Gioannis Giorgia
2	70/LM-0087	Safety and Project Management at Construction Sites	ING-IND/28	C	6	60	Dentoni Valentina
2	70/LM-0098	Renewable Energy Technologies	ING-IND/09	C	6	60	Cocco Daniele



	IA/0319	Integrated Course: Digital Platforms for Monitoring						
2	IA/0236	- Module: Hardware Platforms for IoT	ING-INF/01	C	3	30	Palumbo Francesca	
2	IA/0237	- Module: Data Processing and Transmission	ING-INF/03	C	3	30	Pilloni Virginia	
<b>Curriculum Environmental Technologies</b>								
1	IA/0320/EN	Sustainable solid waste management: materials and energy recovery 	ICAR/03	B	9	90	Muntoni Aldo	
1	IA/0155/EN	Wastewater Treatment Plants 	ICAR/03	B	9	90	Carucci Alessandra Cappai Giovanna S.	
2	IN/0073	Integrated Course: Treatment of Fluids and Waste Gases						
2	IN/0074	- Module: Treatment of Fluids	ING-IND/29	B	6	60	Surracco Marco	
2	IN/0245/EN	- Module: Control and Treatment of Atmospheric Emissions 	ICAR/03	B	6	60	Cappai Giovanna S.	
<b>Curriculum Geo-engineering and Land Protection</b>								
1	IN/0070	Integrated Course: Hydrogeological Protection						
1	IN/0071	- Module: Watershed and Stream Restoration Engineering	ICAR/02	B	6	60	Montaldo Nicola	
1	IN/0072	- Module: Slope Instability and Hydrogeological Risk	GEO/05	B	6	60	Tropeano Giuseppe	
1	IN/0136	Integrated Course: Rock Engineering						
1	IN/0137	- Module: Rock Mechanics	ING-IND/28	B	6	60	Grosso Battista	
2	IN/0138	- Module: Excavation Engineering and Underground Works	ING-IND/28	B	6	60	Careddu Nicola	
2	IN/0210	<i>choose between:</i> Coastal Hydraulics	ICAR/01	B	6	60	Badas Maria Grazia	
2	IN/0211	Design and Management of Geoenvironmental Works for Environment Protection	ING-IND/28	B	6	60	Careddu Nicola	
<b>Curriculum Regional and Urban Planning</b>								
1	IA/0003	Geodesign	ICAR/20	B	6	60	Campagna Michele	
1	IN/0067/EN	Integrated Course: Strategic Environmental Planning						
1	IN/0068/EN	- Module: Environmental Planning 	ICAR/20	B	6	60	Garau Chiara	
2	IN/0242/EN	- Module: Strategic Planning 	ICAR/20	B	6	60	Lai Sabrina	
2	IA/0321	Integrated Course: Planning Energy System						
2	IA/0322	- Module: Territorial Energy Systems: Analysis and Design	ING-IND/11	C	6	60	Frattonillo Andrea	
2	IA/0323	- Module: Sustainable Urban and Territorial Planning	ICAR/20	B	6	60	Balletto Ginevra	



**Laboratories that can be chosen by students to satisfy part of the credits of own free choice**

Sem	Code course	Laboratory	SSD	ECTS	H	Teacher
1	IN/0220	Sanitary and Environmental Engineering Laboratory	ICAR/03	2	25	De Gioannis Giorgia
2	IA/0170	Environmental Geophysics Lab	GEO/11	3	30	Deidda Gian Piero
2	IA/0001	Workshop of Regional Planning	ICAR/20	3	45	Zoppi Corrado Lai Sabrina
2	IN/0221	Laboratory of Safety and Project Management at Construction Sites	ING-IND/28	3	25	Dentoni Valentina

Other optional activities can be communicated on course web site.