ANNEX 1.1

DEGREE PROGRAM DIDACTIC REGULATIONS

MECHANICAL ENGINEERING

CLASS L-9

School: Polytechnic and Basic Sciences School

Department: Department of Industrial Engineering

Didactic Regulations in force since the academic year 2025 - 2026

STUDY PLAN

KEY

Type of Educational Activity (TAF):

A = Basic
B = Characterising
C = Related or Supplementary
D = At the student's choice
E = Final examination and language knowledge
F = Further training activities

Year I – Semester I									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
Mathematical Analysis I	MAT/05 (MATH-03/A)	single	9	72	Frontal lessons and exercises	In-person	A	Mathematical and Computer Sciences	Mandatory
Geometry and Algebra	MAT/03 (MATH-02/B)	single	6	48	Frontal lessons and exercises	In-person	A	Mathematical and Computer Sciences	Mandatory
Industrial Technical Drawing	ING-IND/15 (IIND-03/B)	single	6	48	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
English Language		single	3	24	Frontal lessons	In-person	E		Mandatory

Year I – Semester II									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
Mathematical Analysis II	MAT/05 (MATH-03/A)	single	9	72	Frontal lessons and exercises	In-person	A	Mathematical and Computer Sciences	Mandatory
General Physics I	FIS/01	single	9	72	Frontal lessons and exercises	In-person	A	Physical Sciences	Mandatory
Elements of Computer Sciences	ING-INF/05 (IINF-05/A)	single	6	48	Frontal lessons and exercises	In-person	A	Mathematical and Computer Sciences	Mandatory
Chemistry	CHIM/07 (CHEM-06/A)	single	6	48	Frontal lessons and exercises	In-person	A	Chemical Sciences	Mandatory

Year II – Semester I									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
General Physics II	FIS/01	single	6	48	Frontal lessons and exercises	In-person	A	Physical Sciences	Mandatory
Mathematical Physics	MAT/07 (MATH-04/A)	single	9	72	Frontal lessons and exercises	In-person	C	Mathematical and Computer Sciences	Mandatory
Electrotechnics (+)	ING-IND/31 (IIET-01/A)	single	6	48	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Complements of Electrotechnics (+)	ING-IND/31 (IIET-01/A)	single	0-6	0-48	Frontal lessons and exercises	In-person	C	Industrial and Information Engineering	Mandatory (^)
At the student's choice (**)			0-12	0-96			D		To be selected among suggested courses or approved in a study plane
Further training activities (***)			0-3	0-24			F		Mandatory

Year II – Semester II									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
Construction Science	ICAR/08 (CEAR-06/A)	single	9	72	Frontal lessons and exercises	In-person	C	Civil Engineering and Architecture	Mandatory
Technical Physics	ING-IND/10 (IIND-07/A)	single	12	96	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Mechanical Technology	ING-IND/16 (IIND-04/A)	single	12	96	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
At the student's choice (**)			0-12	0-96			D		To be selected among suggested courses or approved in a study plane
Further training activities (***)			0-3	0-24			F		Mandatory

Year III – Semester I									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
Mechanics Applied to Machines	ING-IND/13 (IIND-02/A)	single	12	96	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Machines	ING-IND/08 (IIND-06/A)	single	12	96	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Fluid Dynamics	ING-IND/06 (IIND-01/F)	single	0-6	0-48	Frontal lessons and exercises	In-person	C	Industrial and Information Engineering	Mandatory (^)
Materials	ING-IND/22 (IMAT-01/A)	single	0-6	0-48	Frontal lessons and exercises	In-person	C	Industrial and Information Engineering	Mandatory (^)
At the student's choice (**)			0-12	0-96			D		To be selected among suggested courses or approved in a study plane
Further training activities (***)			0-3	0-24			F		Mandatory

Year III – Semester II									
Title Course	**SSD**	**Module**	**Credits**	**Hours**	**Type Activities**	**Course Modalities**	**TAF (*)**	**Disciplinary area**	**Mandatory / Optional**
Mechanical Plants	ING-IND/17 (IIND-05/A)	single	9	72	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Construction of Machines	ING-IND/14 (IIND-03/A)	single	9	72	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
Computer Aided Design	ING-IND/15 (IIND-03/B)	single	6	48	Frontal lessons and exercises	In-person	B	Industrial and Information Engineering	Mandatory
At the student's choice (**)			0-12	0-96			D		To be selected among suggested courses or approved in a study plane
Further training activities (***)			0-3	0-24			F		Mandatory
Final Examination			3	24			E		

List of propaedeuticities

- Mathematical Analysis I for Mathematical Analysis II.
- General Physics I for General Physics II.
- Mathematical Analysis I and Geometry and Algebra for Mathematical Physics.
- Electrotechnics for Complements of Electrotechnics.
- Mathematical Analysis II and Mathematical Physics for Construction Science.
- Mathematical Analysis I and General Physics I for Technical Physics.
- Mathematical Analysis II, Mathematical Physics and Industrial Technical Drawing for Mechanics Applied to Machines.
- Technical Physics for Machines.
- General Physics I and Mathematical Physics for Fluid Dynamics.
- Chemistry for Materials.
- Construction Science for Construction of Machines.
- Elements of Computer Science and Industrial Technical Drawing for Computer Aided Design.

Notes:

(*) Legend of the types of training activities (TAF) pursuant to Ministerial Decree 270/04

Types of Training Activities (TAF)	A	B	C	D	E	F	G
	Basic	Characterising	Related or Supplementary	At the student's choice	Final examination and language knowledge	Further training activities	Internships and training placements
ref. D.M. 270/04	Art. 10 paragraph 1, a)	Art. 10 paragraph 1, b)	Art. 10 paragraph 5, a)	Art. 10 paragraph 5, b)	Art. 10 paragraph 5, c)	Art. 10 paragraph 5, d)	Art. 10 paragraph 5, e)

(^) The student is required to select at least one course from *Complements of Electrotechnics*, *Fluid Dynamics*, and *Materials*.

(+) The courses in *Electrotechnics* and *Complements of Electrotechnics* are offered in the first and second half of the first semester of the second year, respectively.

(**) The selection of elective (students' autonomous choice) courses is usually made by submitting the Study Plan in the first semester of the second year. All the exams listed in the table below can be taken without the need to present a Study Plan. However, students may select courses other than those listed in the table by submitting an individual Study Plan, subject to prior approval by the CCD. The year/semester in which these courses are offered depends on the year/semester in which the chosen course is offered in the student's degree program. The following table shows both the elective courses specifically offered for the Mechanical Engineering program, with the indication of the year/semester of delivery (the schedules of these courses are coordinated by the Mechanical Engineering program to avoid overlap with other mandatory courses), and elective courses suggested for autonomous selection available in other degree programs.

(***) The verification of Further Training Activities is certified by the CCD Coordinator based on the attendance certificate issued for successful participation in seminar cycles or other educational activities by the responsible professors, or for attending specific courses organized by the University to provide students with additional language skills, IT and online abilities, interpersonal skills, or other skills useful for entering the workforce. These activities may involve the issuance of digital certifications through open badges or Team Working initiatives such as the ATA formula.

Suggested Courses for Elective Selection (Students' Autonomous Choice)

Course Title	Credits	SSD	Year / Semester	Code	Reference CdS
Complements of Electrotechnics	6	ING-IND/31 (IIET-01/A)	II/I	24712	Mechanical Engineering
Fluid Dynamics	6	ING-IND/06 (IIND-01/F)	II/I	00181	Mechanical Engineering
Materials	6	ING-IND/22 (IMAT-01/A)	II/I	00201	Mechanical Engineering
Computer Applications for Industrial engineering	6	ING-INF/05 (IINF-05/A)	III/II	U2456	Mechanical Engineering
Laboratory of Measurements	6	ING-IND/12 (IMIS-01/A)	III/II	00759	Mechanical Engineering
Fundamentals of Law for Engineering	9	IUS/01 (GIUR-01/A)	-/II	17116	Management Engineering
Metallurgy	6	ING-IND21 (IIND-03/C)	-/I	U5467	Materials Engineering
Mathematical Methods for Engineering	9	MAT/05 (MATH-03/A)	-/I	00225	Naval Engineering
Structural Modeling	9	ICAR/08 (CEAR-06/A)	-/II	19220	Structural and Geotechnical Engineering
Models and Methods of Operational Research	6	MAT/09 (MATH-06/A)	-/I	U2335	Automation and Robotics Engineering
Probability and Statistics	6	SECS-S/02 (STAT-01/B)	-/I	09173	Civil Engineering
Design for Additive Manufacturing	6	ING-IND/15 (IIND-03/B)	-/II	U2531	Naval Engineering
Operational Research	9	MAT/09 (MATH-06/A)	-/II	00147	Management Engineering for Logistics and Production
Statistics for Technology	6	SECS-S/02 (STAT-01/B)	-/II	U4937	Mechanical Engineering for Design and Production
English II (*)	3			U1038	CLA

Notes:

(*) In the elective selection (students' autonomous choice), it is also possible to choose the exam of **ENGLISH II**, worth **3 CFU**. **No course is provided for this exam. The credits are earned through procedures defined by the University Language Center (CLA). The 3 credits (CFU) do not receive a grade, only a pass/fail status (aptitude).**