DIDACTIC REGULATION

Industrial Engineering
Master's Degree Class LM-33

Faculty of Engineering

Index

DIDACTIC REGULATION FOR THE MASTER'S DEGREE COURSE IN INDUSTRIAL ENGINEERING

Introduction and area of competence

1. The present Regulation shall regulate the didactic organization of the Master's Degree Course in Industrial Engineering LM-33 and, in particular, shall determine the elements required in the art. 12 of DM 270/04.
2. The present didactic Regulation of the Master's Degree Course in Industrial Engineering LM-33, pursuant to the Didactic Regulation of the University, shall be approved by the competent didactic structure by majority and shall be approved by the Technical-Supervisory Committee.

I: PURPOSES AND DIDACTIC RULES

Art. 1 - Introduction

1. The Master's Degree Course in Industrial Engineering LM-33 (hereinafter referred to as DC) belongs to the Degree Class LM-23 as provided for in D.M. 270/2004
2. The administrative authorities of the DC shall be the Coordinator (hereinafter referred to as CCdL), the Council of the DC and the Commission for the Didactic Coordination (CCD):
   a. The Coordinator, a teacher appointed by decision of the Technical-Supervisory Committee and shall hold a coordinating function;
   b. The Commission for the Didactic Coordination, with the purpose of promoting and verifying the quality and the unity of the teachings of the DC.
   c. The Council of the DC shall be comprised of teachers who are entitled to at least one teaching;
3. The didactic rules of the DC in Industrial Engineering along with its general framework of formative activities, shall be reported in the attachment forming part of the present Regulation (Attachments 1-3).
4. The present Regulation, pursuant to the academic Didactic Regulation, and to the other didactic regulations, shall regulate the didactic organization of the Degree Course on the elements which were not defined in the aforementioned Regulations.

Art. 2 - Structure of the Degree Course

1. The DC belongs to the Faculty of Engineering
2. The DC is organized into two years, provides for the acquisition of 120 CFU (CFU) and aims to train high-level engineering able to create, realize and manage independently products, industrial installations and highly complex processes of innovation, research and development. The graduates shall also be able to elaborate and plan innovative products and industrial processes, as well as to coordinate the maintenance and organization of machines, systems and industrial installations. Upon completion of the studies, after having acquired 120 formative credits, the students shall be conferred the following study title: “Master Doctor in Industrial Engineering”.
3. The didactic rules of the Master’s Degree Course, along with its general reference framework of formative activities, the CFU assigned to each formative activity, drawn up according to a framework defined by ministerial decree and with due regard for the requirements of ANVUR, are contained in **Attachment 1**, which forms an integral part of the present Regulation.
4. The course of study in Industrial Engineering includes formative activities groups in the following typologies:
   a) characterizing activities;
   b) supplementary activities;
   c) optional activities;
   d) activities related to the final dissertation;
   e) activities related to the internship.
5. The course profiles of each formative activities shall be available on the website of the University, at the following “search for a member of the teaching staff” https://www.uniecampus.it/en/students/search-for-a-member-of-teaching-staff/

Art. 3 - Specific formative objectives and description of the educational path

1. The Master’s Degree Course in Industrial Engineering aims to aims to provide the students with knowledge and abilities useful in order to cover a high range of professional profiles normally associated with the competencies o fan industrial engineer such as providing manufacturing companies with innovative systems for management, maintenance, installation, test and exercise of simple or complex industrial installations. The learning pathway shall provide both characterizing and supplementary activities according to the

chosen curriculum. At the end of the learning pathway the students shall carry out the internship activities, and shall submit the final dissertation.

2. The DC shall be organized into three curricula:
    a. Mechanical Designer
    b. Thermo-mechanics
    c. Technology Management
3. The present Regulation shall be completed with three attachments annually predisposed by the DC:
    a. In **Attachment 1** shall be indicated the general framework of the formative activities;
    b. In **Attachment 2** shall be indicated the formative activities proposed along with the list of the teaching courses and the study plan;
    c. In **Attachment 3** shall be indicated the regulation on internships
4. All the information required by the current legislation such as the formative objectives of the course of study and the activated formative activities, the list of the teachers involved in the DC, shall be published on the University website and on the Course Profile.
5. The programmes of the courses and the other formative activities, as well as the calendar of the exams shall be announced before the beginning of the academic year.
6. The formative activities, autonomously chosen by the student, provided for in Article 2 paragraph 4, letter c, shall be selected among the teachings indicated in **Attachment 2**, and shall not be submitted for the approval of the council of the Degree Course.
7. For all the matters related to their academic career and their study plans, the students shall turn to the orientation tutor assigned to them, also known as tutor on-line (TOL). The Degree Course, in fact, shall offer an ongoing orientation and tutoring service which avails itself of the assistance of tutors selected by the University and operating in conjunction with the coordinator and the Council of the Course of Study.
8. There are no planned preparatory activities with regard to the education path.
9. The Plan of Study provides for the implementation of an internship period, aimed at the comprehension of the link between theory, professional practice and the learning of practical-methodological procedures attributable to the cultural-scientific area of interest of the Degree Course (See Attachment 3).

Art. 4 - Learning Results

1. The graduates of the DC shall possess the following abilities:

Knowledge and comprehension

The graduates in Industrial Engineering shall acquire knowledge and comprehension in the fundamental aspects of mechanics, plant engineering, industrial production and management. In particular they shall understand the theoretical and practical aspects of systems modelling; mechanical design and production (machines and industrial installations); the most important methodologies and technologies used in industrial production.

Applying knowledge and comprehension

The graduate in Industrial Engineering shall acquire the ability to apply the mathematic methods related to the Disciplines of Industrial Engineering in order to describe and analyze various engineering problems; shall be able to design and develop dedicated applications, in collaboration with other professional figures, within the industrial or public sector. The acquisition of said abilities shall be evaluated through different forms of verification, such as exams, workshops, internships and the final dissertation.

Making judgements

The graduates shall develop the ability to collect and interpret information, and to express autonomous judgement on various engineering issues, and on the socio-economic themes connected to them. The courses based on engineering subjects shall contribute to the training of the students through individual and group exercises, enabling them to become familiar with a wide variety of scenarios related to the aforementioned circumstances. The abilities thus acquired by the students shall be evaluated through different forms of didactic verification, such as exams, internships, and the final dissertation.

Communication Skills

During the professional activity, the industrial engineer shall be able to communicate with both specialized and non-specialized interlocutors, both in a national and international context. Therefore, upon completion of their formative pathways all the students shall be able to express and support their ideas in a technical context, to present the results of their work in a easily understandable way, to be efficient and convincing in the technical commercial relations and to communicate with the technical personnel in a simple and effective way.

Learning skills

A proper Industrial Engineer shall also be able to deal with a great variety of issues related with technological innovation as well as the evolution of the economic-productive system and of the industrial sector, in order to grow professionally. The didactic activities provided in the Master's Degree shall use didactic methodologies such as: analysis and resolution of different complex problems, integration of various disciplines and group exercises. Such methodologies shall promote the acquisition of learning and adaptation abilities.

The methodological rigour of the didactic activities shall enable the students to develop logical thinking and, by extension, to demonstrate a theory. The final dissertation is a further opportunity to demonstrate the acquisition of said abilities.

Art. 5 - Professional figures, sources of employment and education prospects

1. The Master's Degree Course in Industrial Engineering aims to aims to The Master's Degree Course in Industrial Engineering aims to aims to provide the students with knowledge and abilities useful in order to cover a high range of professional profiles normally associated with the competencies o fan industrial engineer such as providing manufacturing companies with innovative systems for management, maintenance, installation, test and exercise of simple or complex industrial installations.
2. The most important sources of employment for an Industrial Engineer are mostly related to innovation and production development, advanced design, planning and programming, management of complex systems both as professionals and as operators in manufacturing enterprises and in public administrations.
3. Pursuant to the current legislation, the graduates in Industrial Engineering may work in private practice subject to the registration to the Engineering Register – Section A-Industrial Sector. In addition, upon completion of the learning pathway and pursuant to the current registration, the graduates shall be able to access to the Research Doctorate and to the second level Masters.

Art. 6 - Admission and enrolment

1. In order to enrol into the DC the students shall satisfy the following requirements:
    a. Bachelor's Degree belonging to the class 08, as provided for by D.M. 509/99 or to the class L7, as provided for by the D.M. 270/04;

b. an equivalent Degree attained abroad, deemed appropriate according to the current legislation.
c. Shall be admitted to the Degree Course all the students with a Bachelor's Degree that does not belong to the Degree Classes provided for in the previous paragraph, provided that the candidate has attained the following CFU/SSD:

Mechanical Designer

a. 36 CFU in the following disciplinary sectors SSD, CHIM/07 FIS/01 MAT/03 - 05;
b. 60 CFU in SSD ING-IND/08 - 10 - 12 - 13 - 15 - 17 - 22 - 31 - 35 ICAR/08;

Technology Management

a. 36 CFU in SSD, FIS/01, MAT/03 or MAT/05, CHIM/07;
b. 60 CFU in SSD ING-IND/08 - 09 - 10 - 12 - 13 - 15 - 17 - 22 - 31 - 35;

Thermo-Mechanics

a. 36 CFU in SSD, FIS/01, MAT/03 or MAT/05, CHIM/07;
b. 60 CFU in SSD ING-IND/06 - 08 - 09 - 10 - 12 - 13 - 15 - 17 - 31 – 35.

2. Without prejudice to the curricular requirements, for the purpose of the admission to the Master's Degree Course the students shall take an oral exam for the assessment of their personal preparation. In that respect the DC shall identify a dedicated evaluation committee.
3. There shall not be any limits to the possibility of enrolment as 'studente fuori corso', nor a maximum number of repeatable years.
4. The recognition of the CFU of the incoming students as well as the quantification of the minimum number of CFU that the students shall attain in an academic year in order to continue the course of study to another academic year, shall be established in the related Academic Regulations.

Art. 7 - Examinations and tests

1. For each formative activity shall be provided an examination, upon completion of the didactic activities represented by the learning objects present in the VLE.
2. The students shall acquire the CFU attributed to a particular formative activity only if they pass the relative examination.
3. The examination and the final evaluations needed for the attainment of the title shall not be

more than 10. For the purpose of the calculation shall be considered the following formative activities:

a. characterizing;
b. supplementary;
c. optional;
d. related to the final dissertation;
e. further linguistic knowledge, eventual formative internships, IT, telematic and relational abilities.

4. The examinations shall consist in a test structured in conformity with what is provided for in the "Regulation for the implementation of the examination and with due regard for the following rules:
   a. The examination shall be organized so as to evaluate the knowledge, the comprehension, and the application of the examination subjects, demonstrating the proficiency of the student in the didactic units/thematic units of the related course.
   b. The final evaluation shall take into account the results of the partial examinations, carried out with due regard for the Academic Regulations, in which case the teacher shall specify in the "course profile" the kind of activity, the modalities and the criteria of evaluation.
5. The professor in charge of the teaching, before the beginning of each academic year, and with due regard for the general regulation of the University, shall communicate the modalities for the examination, the assessment criteria and the possibility to carry out partial examinations. The manner in which the examination shall be carried out shall be the same for all the students with due regard for what has been established at the beginning of the academic year.
6. Eventual partial verifications shall not replace the final examination.
7. With regard to the implementation of the examinations shall be applicable the rules provided for by the Academic Regulation.

Art 8 - Duration

1. Shall be applicable the rules provided for by the Academic Regulation.

Art 9 - Mobility and studying abroad

1. The Degree Course, in line with the provisions of the University shall promote the exchange of teachers and students through international cooperation and bilateral agreements. In this regard see the indications published on the website of the University on the International

Cooperation and the Erasmus Policy at the following link:

2. https://www.uniecampus.it/ateneo/cooperazione-internazionale/index.html.

Art. 10 - Final Dissertation

1. The final dissertation shall be written by the student with the supervision of a teacher of the Faculty of Engineering or of an external teacher entitled to one of the teachings provided for the Degree Course. The elaboration of the final dissertation, shall begin at least six months before the date estimated for the discussion, in order to guarantee its accuracy.
2. The final dissertation shall focus on any subject related to one or more formative activities of the following typology:

   a. characterizing;
   b. supplementary;
   c. optional.

3. The final dissertation may be written in a foreign language previously agreed upon with the supervising professor and the Coordinator of the Degree Course. In such case the student shall provide a detailed summary of the dissertation in Italian.
4. The dissertation shall refer to the following typologies:

   a. critical analysis of a particular research article or of a theoretical contribution;
   b. an in-depth theoretical and/or empirical analysis of a subject related to a particular course or to another didactic activity;
   c. a study on cutting edge engineering, carrying out activities of scientific modelling or experimental activities;

5. The final dissertation shall be discussed publically, shall be evaluated: 1) completeness and rigour of the dissertation; 2) methodology; 3) results of the dissertation. The dissertation shall be assigned maximum 8 points

Art. 11 - Attainment of the Degree

1. The student shall be attain the Degree with at least 120 CFU and upon completion and discussion of the final examination (final dissertation).
2. With regard to the conditions for the admission to the final dissertation, the degree

examination board, the implementation of the examination and the final grade see the Academic Regulation for the final dissertation.

3. The secretariat upon request, shall provide the graduate students with the Diploma Supplement, which shall describe the category, the level, the context, the content and the status of the studies carried out in accordance with the standard eight-point plan developed on the initiative of the European Commission, the European Council and of the UNESCO.

II - OPERATIVE RULES

Art. 12 - Obligations related to frequency

1. The student shall be admitted to the examination related to a determined teaching only after having implemented all the online learning objects making up the course, except for expressed and motivated waivers provided for by the teachers, who shall clarify them in their teacher's profile.
2. The DC provides for the enrolment as part-time student, for all the qualified students, pursuant to what is regulated in the Academic Regulations.

Art. 13 - Enrolment to the following years, transfer and withdrawal from the studies

1. Trovano applicazioni le norme previste dal regolamento dell'Ateneo.

Art. 14 - Recognition of incoming CFU

1. See the general regulations provided for by the University; along with the opinion of the DC if the aforementioned regulation shall require so.

Art. 15 - Dispositions for the students

1. The DC shall apply the rules provided for by the University regulating the frequency to the formative activities, the number of the credits to be acquired for the enrolment to the following course year; the requirements for the implementation of outsourcing education, and all the actions aimed at an effective learning. In this regard see the Student Regulation, the website page on the LDs and the Erasmus Policy of the University.

Art. 16 - Assessment of the Didactic Activity

1. The DC shall implement forms of assessment of the quality of the didactic activities provided for by the current legislation with the modalities and the deadlines provided for by the University's Quality Assurance Committee.

Art. 17 - Flexibility of the learning pathway

1. The Master's Degree Course in Industrial Engineering, with the collaboration of the online tutors (OT) proposes orientation and tutoring activities in relation to the individual study plan, of the optional formative activities and with regard to the implementation of the curricular internship, promoting a student-centred approach to learning focused on encouraging the assumption of an active role in the definition and in the time frame of the learning pathway. The DC shall promote a collaboration with the disciplinary tutors whom, coordinating with the teachers in charge of the course, shall have the task of supporting the preparation of the didactic materials and of the partial examinations, guaranteeing the possibility to implement flexible learning pathways. Finally, the student shall have the possibility to enrol in the DC and to take advantage of the formative offer at any time of the academic year and to carry out the examinations during the seven examination sessions, provided for in the academic calendar.

III Title - FINAL AND TRANSITIONAL RULES

Art. 18 - Amendments to the Regulation

1. Any amendment to the present Regulation shall be proposed by the Coordinator of the DC or by at least one third of the members of the Council of the DC or at least one third of the members of the Council of the DC and shall be approved by absolute majority and, successively, by the Technical Supervisory Committee.

2. In case of failure to approve the amendment, the proponent shall send a response, along with a report describing its motivations directly to the Technical Supervisory Committee.
3. The modifications to the present regulation, subject to the verification of their conformity to the Academic Regulations shall be issued by Decree of the President of the Technical Supervisory Committee.
4. Eventual legislative acts compatible with the Academic Regulation and incompatible with

what is stated in the present regulation shall be applicable even in the absence of an expressed modification, but shall determine the immediate beginning of the procedure provided for in the first paragraph of the present article.

5. Eventual interpretive or applicative problems resulting from the succession of the Regulations in the course of time shall be the subject of a specific assessment on the part of the DC.

Art. 19 - Transitional regulations

1. The present regulation shall be applicable from the academic year 2018/2019.

Attachment 1: General Framework of Formative Activities

MECHANICAL DESIGNER CV

Supplementary Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**min CFU**	**max CFU**	**minimum by D.M.**
Supplementary Activities	Building Science	ICAR/08 CONTINUUM MECHANICS	6	33	33	12
	Metallurgy	ING-IND/21 METALIC MATERIALS	9			
		ING-IND/21 MECHANIC METALLURGY	9			
	Economic Engineering	ING-IND/35 BUSINESS STRATEGY AND INDUSTRIAL ORGANIZATION	9			
Total Supplementary Activities			33			
Characterizing Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**min CFU**	**max CFU**	**minimum by D.M.**
Mechanic Engineering		ING-IND/17 DESIGN OF INSTALLATIONS	54	54	54	-
		ING-IND/16 MANIFACTURING RESEARCH				
		ING-IND/15 VIRTUAL PLANNING TECHNIQUES				
		ING-IND/08 MACHINE PLANNING				
		ING-IND/14 MECHANICAL DESIGN				
		ING-IND/13 FUNCTIONAL DESIGN				
Minimum credits reserved by D.M. 45:						
Total Characterizing Activities			54			

Other Activities						
Optional			12	12	12	
For the Final Dissertation (art. 10, paragraph 5, letter c)		Final Dissertation	18	18	18	
Further Formative Activities (art.10, paragraph 5, letter d)	Further Linguistic Knowledge	-	-	-	-	
	IT and Telematic Abilities	-	-	-	-	
	Further Knowledge for the Insertion into the Labour Market	-	-	-	-	
	Internship	Internship	3	3	3	
Minimum credits reserved by the University art. 10, paragraph 5 lett. d			-			
Total Other Activities			33			

THERMOMECHANICS CV

Supplementary Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**min CFU**	**max CFU**	**minimum by D.M.**
Supplementary Activities	Fluid Dynamics	ING-IND/06 AERODYNAMICS AND GAS-DYNAMICS	9	33	33	12
	Environmental Technical Physics	ING-IND/11 ENVIRONMENTAL ENERGY	9			
	Electro-Technics	ING-IND/31 ELECTRICAL SYSTEMS	6			
	Economic-Management Engineering	ING-IND/35 BUSINESS STRATEGY AND INDUSTRIAL ORGANIZATION	9			
Total Supplementary Activities			33			
Characterizing Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**min CFU**	**max CFU**	**minimum by D.M.**
Mechanical Engineering		ING-IND/08 DESIGN OF MACHINERY	54	54	54	-
		ING-IND/17 DESIGN OF MECHANICAL INDUSTRIAL PLANTS				
		ING-IND/14 MECHANICAL DESIGN				
		ING-IND/12 QUALITY CONTROL MEASURES				
		ING-IND/10 THERMO-TECHNICAL DESIGN				
		ING-IND/09 SUSTAINABLE ENERGY PLANNING				
Minimum credits reserved by D.M. 45:						
Total Characterizing Activities			54			

Other Activities						
Optional			12	12	12	
For the Final Dissertation (art. 10, paragraph 5, letter c)		Final Dissertation	18	18	18	
Further Formative Activities (art.10, paragraph 5, letter d)	Further Linguistic Knowledge	-	-	-	-	
	IT Abilities	-	-	-	-	
	Further knowledge for the insertion into the labour market	-	-	-	-	
	Internship	Internship	3	3	3	
Minimum credits reserved by the University art. 10, paragraph 5 lett. d			-			
Total Other Activities			33			

TECHNOLOGY MANAGEMENT CV

Supplementary Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**Min CFU**	**Max CFU**	**minimum by D.M.**
Supplementary Activities	Environmental Physics	ING-IND/11 ENVIRONMENTAL ENGINEERING	9	33	33	12
	Metallurgy	ING-IND/21 FUNDAMENTALS OF METALLURGY	6			
	Economic-Management Engineering	ING-IND/35 BUSINESS ADMINISTRATION	9			
		ING-IND/35 BUSINESS STRATEGY AND BUSINESS ORGANIZATION	9			
Total Supplementary Activities			33			
Characterizing Activities						
Subject Area	**Field of Reference**	**Sector**	**CFU**	**Min CFU**	**Max CFU**	**minimum by D.M.**
Mechanical Engineering		ING-IND/17 DESIGN OF MECHANICAL INDUSTRIAL PLANTS	54	54	54	-
		ING-IND/16 INTEGRATED PRODUCTION SYSTEMS				
		ING-IND/16 MANUFACTURING STUDIES				
		ING-IND/15 TECHNIQUES FOR VIRTUAL PLANNING				
		ING-IND/14 DESIGN AND MECHANICAL CONSTRUCTION				
		ING-IND/12 QUALITY CONTROL MEASURES				
Minimum credits reserved by D.M. 45:						
Total Characterizing Activities			54			

Other Activities						
Optional			12	12	12	
For the Final Dissertation (art. 10, paragraph 5, letter c)		Final Dissertation	18	18	18	
Further Formative Activities (art.10, paragraph 5, letter d)	Further Linguistic Knowledge	-	-	-	-	
	IT Abilities	-	-	-	-	
	Further knowledge for the insertion into the labour market	-	-	-	-	
	Intership	Internship	3	3	3	
Minimum credits reserved by the University art. 10, paragraph 5 lett. d			-			
Total Other Activities			33			

Attachment 2: General Framework of Formative Activities (Study Plan)

MASTER'S DEGREE IN INDUSTRIAL ENGINEERING - LM-33 - MECHANICAL DESIGNER CV

SSD		Subject Area	Course	CFU
1st Course Year				
ING-IND/08	B	Mechanical Engineering	DESIGN OF MACHINERY	9
ING-IND/13	B	Mechanical Engineering	FUNCTIONAL PLANNING	9
ING-IND/14	B	Mechanical Engineering	MECHANICAL DESIGN	9
ING-IND/15	B	Mechanical Engineering	TECHNIQUES FOR VIRTUAL PLANNING	9
ING-IND/16	B	Mechanical Engineering	MANUFACTURING STUDIES	9
ICAR/08	A	Building Science	BUILDING MECHANICS	6
		Optional	OPTIONAL COURSE	6
2nd Course Year				
ING-IND/21	A	Metallurgy	MECHANICAL METALLURGY	9
ING-IND/21	A	Metallurgy	METALLIC MATERIALS	9
ING-IND/17	B	Mechanical Engineering	DESIGN OF MECHANICAL INDUSTRIAL PLANTS	9
ING-IND/35	A	Management Engineering	BUSINESS STRATEGY	9
		Optional	OPTIONAL COURSE	6
		art. 10, paragraph 5, letter d	INTERNSHIP	3
	D	art. 10, paragraph 5, letter d	FINAL DISSERTATION	18
Optional Activities				
ING-IND/14	B	Mechanical Engineering	RELIABILITY AND SAFETY OF MACHINERY	6
ING-IND/12	B	Mechanical Engineering	EXPERIMENTAL METHODS FOR STRUCTURAL DYNAMICS	6
ING-IND/11	A	Technical Environmental Physics	ENVIRONMENT CONTROL ANALYSIS	6

MASTER'S DEGREE IN INDUSTRIAL ENGINEERING- LM-33 – THERMOMECHANICS CV

SSD		Subject Area	Course	CFU
1st Course Year				
ING-IND/08	B	Mechanical Engineering	DESIGN OF MACHINERY	9
ING-IND/10	B	Mechanical Engineering	THERMO-TECHNICAL DESIGN	9
ING-IND/12	B	Mechanical Engineering	QUALITY CONTROL MEASURES	9
ING-IND/06	A	Fluid Dynamics	AERODYNAMICS AND GAS-DYNAMICS	9
ING-IND/11	A	Technical Environmental Physics	ENVIRONMENTAL ENERGY	9
ING-IND/31	A	Electrotechnics	ELECTRICAL SYSTEMS	6
		Optional	OPTIONAL COURSE	6
2nd Course Year				
ING-IND/14	B	Mechanical Engineering	MECHANICAL DESIGN	9
ING-IND/17	B	Mechanical Engineering	DESIGN OF MECHANICAL INDUSTRIAL PLANTS	9
ING-IND/35	A	Management Engineering	BUSINESS STRATEGY	9
ING-IND/09	B	Mechanical Engineering	SUSTAINABLE ENERGY PLANNING	9
		Optional	OPTIONAL TEACHING	6
		art. 10, paragraph 5, letter d	INTERNSHIP	3
	D	art. 10, paragraph 5, letter c	FINAL DISSERTATION	18
Optional Activities				
ING-IND/11	A	Technical Environmental Physics	ENVIRONMENT CONTROL ANALYSIS	6
ING-IND/08	B	Mechanical Engineering	TURBOMACHINERY	6
ING-IND/12	B	Mechanical Engineering	EXPERIMENTAL METHODS FOR STRUCTURAL DYNAMICS	6
ING-IND/14	B	Mechanical Engineering	RELIABILITY AND SAFETY OF MACHINERY	6

MASTER'S DEGREE IN INDUSTRIAL ENGINEERING - LM-33 – TECHNOLOGY MANAGEMENT CV

SSD		Subject Area	Course	CFU
1st Course Year				
ING-IND/12	B	Mechanical Engineering	QUALITY CONTROL MEASURES	9
ING-IND/14	B	Mechanical Engineering	DESIGN AND MECHANICAL CONSTRUCTION	9
ING-IND/15	B	Mechanical Engineering	TECHNIQUES FOR VIRTUAL PLANNING	9
ING-IND/16	B	Mechanical Engineering	INTEGRATED PRODUCTION SYSTEMS	9
ING-IND/11	A	Technical Environmental Physics	ENVIRONMENTAL ENERGY	9
ING-IND/21	A	Metallurgy	FUNDAMENTALS OF METALLURGY	6
		Optional	OPTIONAL COURSE	6
2nd Course Year				
ING-IND/16	A	Mechanical Engineering	FABRICATION STUDIES	9
ING-IND/35	A	Mechanical Engineering	BUSINESS STRATEGY	9
ING-IND/35	B	Management Engineering	BUSINESS MANAGEMENT	9
ING-IND/17	A	Mechanical Engineering	DESIGN OF MECHANICAL INDUSTRIAL PLANTS	9
		Optional	OPTIONAL COURSE	6
		art. 10, paragraph 5, letter d	INTERNSHIP	3
	D	art. 10, paragraph 5, letter c	FINAL DISSERTATION	18
Optional Activities				
ING-IND/08	B	Mechanical Engineering	TURBOMACHINERY	6
ING-IND/12	B	Mechanical Engineering	EXPERIMENTAL METHODS FOR STRUCTURAL DYNAMICS	6
ING-IND/14	B	Mechanical Engineering	RELIABILITY AND SAFETY OF MACHINERY	6
ING-IND/11	A	Technical Environmental Physics	ENVIRONMENT CONTROL ANALYSIS	6

REGULATION ON CURRICULAR INTERNSHIP BACHELOR'S DEGREE COURSES AND MASTER'S DEGREE COURSES IN:

CIVIL AND ENVIRONMENTAL ENGINEERING (D.M. 270/04)

INDUSTRIAL ENGINEERING (D.M. 270/04)

IT AND AUTOMATION ENGINEERING (D.M. 270/04)

The Study Plan of the Bachelor's Degree Courses in Civil and Environmental Engineering (L7), Industrial Engineering (L9), IT and Automation Engineering (L8) and of the Master's Degree Courses in Civil and Environmental Engineering (LM23), Industrial Engineering (LM33), IT and Automation Engineering (LM32) of Telematic University eCampus shall give special priority to the curricular internship, with the aim to have the students experiment their skills in the labour market as an addition to their academic education. The curricular internship shall consist in a period of practical activity aimed exclusively at the attainment of the CFU needed for the successful completion of the formative path of the degree courses and shall not constitute a professionalizing internship for the purpose of the state examinations for the registration to the professional registers (Register of the Engineers).
The internship shall be carried out at public or private structures affilated to the University, at eCampus University, at research centres of eCampus University or at other italian or foreign IT and Automation Engineering Departments and Institutes of engineering disciplines, with the supervision of a didactic tutor (a member of the Internship Committee of the Faculty of Engineering of eCampus University) and of a company tutor (or a Teacher of the University) who shall guide the students during their intership period.

Art. 1 – PURPOSES AND ACTIVITIES OF THE INTERNSHIP

The curricular internship, aimed at the attainment of the academic title, is intended to promote the attainment of the following formative objectives:

a) the comprehension of the links between theory and professional practice and the integration between theoretical knowledge, acquired in the Bachelor's Degree Courses in Civil and Environmental Engineering (L7), Industrial Engineering (L9), IT an Automation Engineering (L8) and the Master's Degree in Civil and Environmental Engineering (LM23), Industrial Engineering (LM33), IT and Automation Engineering (LM32), and the concrete applications of professional practice;
b) learning the procedures and the methodologies typical of the profession of engineer;
c) the progressive acquisition, under the close supervision of the tutor, of competences related to the professional role, in relation to the different labour contexts in which the engineers operate.

The internship activity shall amount to 25 hours per formative credit, in accordance with the requirement of the didactic offer.

In particular:

- Bachelor's Degree Course in Civil and Environmental Engineering (L7): n° 6 CFU amounting to 150 hours.
- Bachelor's Degree Course in Industrial Engineering (L9): n° 9 CFU amounting to 225 hours.
- Bachelor's Degree Course in IT and Automation Engineering (L8): n° 6 CFU amounting to 150 hours.
- Master's Degree Course in Civil and Environmental Engineering (LM23): n° 6 CFU amounting to 150 hours.
- Master's Degree Course in Industrial Engineering (LM33): n° 3 CFU amounting to 75 hours.
- Master's Degree Course in IT and Automation Engineering (LM32): n° 3 CFU amounting to 75 hours.

In order to allow a certain variety of experiences, the interns shall carry out their practical activity:

a) At various public or private organizations – Companies, Authorities, Associations, Institutions, Academies, Research Centres – where the following activities are performed:

   - Planning, production, implementation, design, measures and controls, diagnostics in the industrial, civil and environmental, industrial, IT fields of expertise;

   - Research activity in the industrial, civil and environmental, industrial, IT fields of expertise;

b) Within the various Courses of Study provided by the Faculties and the Research Centres of eCampus University, or by another University. In such case, the theoretical or technical-methodological internship activities shall be mainly oriented at the involvement of the interns in study and research activities, under the direct supervision of a Teacher of the Faculty of Engineering.

The internship shall be programmed and follow an individual project, planned on the basis of a "training project" between intern and tutor specifying the mutual responsibilities and the respective tasks in the implementation of the project. Said individual project shall be viewed by the Internship Committe of the Faculty of Engineering of eCampus University.

For the purpose of the report of the completed internship activity, only the hours of effective implementation of the practical and didactic exercises shall be considered, not the hours of presence within the structure (shall be excluded for example the hours of stay in the accomodations, the breaks or the hours of stay in the in the structure before and after the practical activity).

The formative internship shall not be considered as an employment relationship.

The maximum overall duration of the period of internship shall be of 6 months. In the calculation of the aforementioned limit shall not be taken into account the periods of abstension or suspension of the internship. The maximum duration shall be 6 months included any potential waivers.

Art. 2 – ACCESS TO THE INTERNSHIP

In order to begin the internship the student shall:

- Make mandatory and preventive contact with the Internship Office by email to the following address: tirocinio.lettere@uniecampus.it;
- Have attained at least 100 CFU out of 180, if the intern is enroled to I level Degree Course; or having attained at least 60 CFU out of 120, if the student is enroled to a II level Degree Course;
- If the student wishes to carry out the internship at an external authority, please note that the relationship between the University and the host structure shall be regulated by a specific agreement. In case the structure where the student wishes to carry out the internship does not have an agreement with the University, it is mandatory to stipulate it before the beginning of the internship. The students shall signal eventual structures on the basis of their formative interests, after having verified the availability; the Intership Commission reserves the right to evaluate the eventual structures proposed by the students, while it is the responsibility of the Internship Office to directly contact the host subject in order to stipulate the Agreement;
- If the students wish to carry out their internship at an eCampus research centre or at other departments and/or research centres of other Universities, in the first case they shall identify a teacher within their Degree Course and verify their willingness to follow them as a tutor; in the second case they shall identify a teacher within the Degree Course equivalent to the course attended by the student at eCampus University.

Art. 3 – PLACE OF INTERNSHIP

Shall be regarded as places of internship:

- **Public and private authorities, private companies, institutions, other university departments (both italian and foreign) who shall stipulate an agreement with eCampus University.**

  For the purpose of the stipulation of an agreement with the University, said authorities shall submit to the Internship Office:

  1) **For the purpose of the stipulation of an agreement with the University, said authorities shall submit to the Internship Office:**
  2) **Detailed indications on the operational activity and/or of research at the structure and specific indications on the formative activities performed by the interns;**
  3) **CV of the tutor.**

- **eCampus University or one of its research centres.**

- **In case the internship is carried out at one of the Faculties and Research Centres of eCampus University, the student shall have the possibility to carry out the related activities in "At Home) modality. In this modality, the activities shall be carried out also outside of the actual physical structure of eCampus University (for example at home, in public libraries, etc..), nevertheless the students required to declare in the attendance register the activities and the place where they are implemented. The aforementioned register shall be countersigned by the internal tutor who shall verify, as far as possible, the veracity of what has been declared.**

Art. 4 – PURPOSES AND CHARACTERISTICS OF THE TUTORS

The tutor shall follow the student during the internship period, agreeing on the practical modalities of its implementation, making sure that the internship is carried out appropriately and participating to the evaluation of the internship.

In the public/private entities the function of tutor shall be carried out by the personnel related to the occupational activities provided for in Art. 1, with an appropriate professional experience and capable of guaranteeing a stable relationship with the structure throughout the duration of the internship.

Within the University, shall carry out the function of tutor the teachers of the Bachelor's Degrees and the Master's Degrees and/or of the research centres.

Art. 5 – RULES OF CONDUCT FOR THE INTERN

The intern shall comply with what was agreed in the agreement between the University and the host, shall respect the disciplinary regulations, the organizational/safety/hygiene rules. During and after the internship the intern shall maintain the strictest confidence on the information acquired during the implementation of the internship. If the host adopts a code of conduct or an internal rule, the intern shall comply with it.

Art. 6 – INSURANCE POLICIES

The RC and INAIL insurance policies, necessary for the implementation of the internship, shall be at the expense of eCampus University.

Art. 7 – TRAINING PROJECT

The Training Project shall be a an actual contract between the intern and the host. The Formative Project shall contain personal information on the intern, the time and the place of the internship, information on the insurance policy, the name of the tutor/tutors.

In the Training Project shall be indicated the purpose of the internship and the modalities necessary in order to reach the target set (namely the competences that the intern wishes to attain at the end of the internship and how to achieve them).

The duration of the internship and the modalities of access to the facilities of the company shall be described in the Training Project, duly filled in before the beginning of each internship period.

The Internship Project shall be activated **only once the Agreement has been stipulated and only once the student has communicated all the necessary information**, personal and of the authority, for the implementation of the internship.

Once the aforementioned form has been filled in, the Internship Office shall send back to the student the Training Project countersigned by the functionary of the Office, along with the documents necessary for the implementation of the internship:

- **Register of the attendances**

- **Report on the internship period** (which shall be carried out by the intern upon the completion of the internship activities);

- **Evaluation report** (which shall be carried out by the company/university tutor at the end of the internship).

Once the internship has ended, all the documents shall be emailed to the Internship Office. The original forms shall be delivered to the Student Secretariat, along with the graduation application form.