DIDACTIC REGULATIONS OF THE DEGREE PROGRAM MECHANICAL ENGINEERING FOR DESIGN AND PRODUCTION

CLASS LM-33

School: Polytechnic and Basic Sciences

Department: Industrial Engineering

Regulations in force since the academic year 2025-2026

ACRONYMS

CCD	[Commissione di Coordinamento Didattico]	Didactic Coordination Commission
CdS	[Corso/i di Studio]	Degree Program
CFU	[Crediti Formativi Universitari = 1 ECTS]	University training credits
CPDS	[Commissione Paritetica Docenti-Studenti]	Joint Teachers-Students Committee
OFA	[Obblighi Formativi Aggiuntivi]	Additional Training Obligations
RDA	[Regolamento Didattico di Ateneo]	University Didactic Regulations
SSD	[Settore Scientifico Disciplinare]	Scientific Disciplinary Sector
SUA-CdS	[Scheda Unica Annuale del Corso di Studio]	Annual single form of the Degree Program
TAF	[Tipologia di Attività Formativa]	Type of Educational Activity

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Art. 1
Object

1. These Regulations govern the organizational aspects of the Master's Degree in Mechanical Engineering for Design and Production (class LM-33 Mechanical Engineering, SUA ID=1604844). The Master's Degree in Mechanical Engineering for Design and Production (Mechanical Engineering for Design and Manufacturing) is part of the Department of Industrial Engineering and is offered in both Italian and English. The didactic activity is carried out in modality of Type A: Conventional Study Course.
2. The CdS is governed by the Didactic Coordination Commission (CCD), pursuant to Art. 4 of the RDA.
3. The Didactic Regulations are issued in compliance with the relevant legislation in force, the Statute of the University of Naples Federico II, and the RDA.

Art. 2
Training objectives

The training of the Master's graduate in Mechanical Engineering for Design and Production is aimed at covering a wide range of roles typically filled by industrial engineers in companies that produce goods and/or services, particularly in relation to design and production issues using advanced tools and techniques.
The education that the Master's graduate in Mechanical Engineering for Design and Production acquires enables them to be successfully employed within Research and Development departments due to their ability to independently develop innovative projects in terms of both product and process. They can work autonomously or within teams, often multidisciplinary, and may also take on coordination responsibilities.

The Master's graduate in Mechanical Engineering for Design and Production is able to tackle unique and recurring problems related to:

- The innovation and development of industrial products through advanced numerical design techniques, structural optimization (FEM), and virtual prototyping (CAD).
- The study and development of mechanical and mechatronic systems in various production sectors, particularly in the mechanical, healthcare, and transport industries.
- The engineering and construction of artifacts, equipment, machinery, and production systems of various complexities.
- The development of new manufacturing technologies and methods using both traditional and innovative materials.
- The management of industrial production (materials, machinery, and human resources), safety, and industrial maintenance.

In all of these cases, they are capable of addressing advanced challenges posed by the use of new materials and manufacturing processes, and they play a crucial role in supporting teams of experts engaged in the design, production, and management of complex systems, including by providing necessary support in proposing and conducting advanced experimental activities.

They are also able to ensure compliance with standards in mechanical engineering, particularly concerning the manufacturing of products, and they can propose advancements in standards.

The training path includes three curricula, one of which is taught entirely in English.

The first curriculum is divided into five tracks, corresponding to the five main professional figures that the study course aims to train. The tracks students can choose are:

- Advanced and Smart Mechanical Design
- Advanced and Smart Production
- Vehicle Design
- Technological Processes
- Mechatronics

The focus areas of the first curriculum include mechatronics and complex mechanical systems, virtual modeling and prototyping, functional and structural design, manufacturing technologies, and production management. The common part of the five tracks includes some courses in the following disciplinary areas:

- Drawing and Methods of Industrial Engineering
- Applied Mechanics
- Mechanical Design and Machine Construction
- Manufacturing Technologies and Systems
- Mechanical Industrial Plants

The second curriculum, in railway mechanics, focuses on the design, manufacturing technologies, and management of complex mechanical systems in the railway vehicle sector (body, bogie, wheels and rails, overhead line, etc.). Although differently oriented, the railway mechanics curriculum aims to achieve the same specific educational objectives, through courses included in the same disciplinary areas as those of the first curriculum.

The third curriculum, in Sustainable Development, is taught in English. Its objectives are focused on the design and creation of industrial products that meet new or evolving user needs. It also covers how innovation in materials and system architecture can improve performance while reducing environmental impact. Additionally, the Sustainable Development curriculum aims to define green technologies and lean production systems for manufacturing highly complex mechanical systems.

The study program is completed by additional training activities (further knowledge, internships inside or outside the university, and thesis work). These activities aim to give the graduate the ability to communicate effectively (also in English) in technical-scientific fields, to make good use of the relevant scientific literature, and to acquire new knowledge and methodologies (including IT) during their professional career.

The thesis work may involve design activities (product, process, plant) or original research activities to demonstrate not only the mastery of the subjects studied but also the ability to address new issues and work autonomously within an industrial or research structure.

To promote the training of engineering professionals with a strong interdisciplinary character, students enrolled in the Master's Degree Course are offered the opportunity to participate, in partial

overlap with the Master's Degree studies, in the Minor paths active at the University governed by specific regulations and associated with this and other Degree Courses. Pursuant to Art. 18, c. 2, of the University Teaching Regulations, admission to the Minor course gives rise to a career distinct from that of the Degree Course in which the student is enrolled. The activities expected in the Minor path may be recognized within the career of students enrolled in the Degree Course, in accordance with the Teaching Regulations; in any case, at least 6 CFU carried out in the Minor paths must be reserved for extracurricular activities in addition to the CFU of the statutory plan for obtaining the qualification (pursuant to Art. 18, c. 1, of the University Teaching Regulations).

Art. 3
Professional profile and work opportunities

Mechanical Engineer for the Design of Mechanical Elements and Systems

Function in a work context

The Mechanical Design Engineer carries out, often with coordination responsibilities, modeling, functional, and structural design activities using advanced digital techniques for highly complex mechanical elements and systems.

They participate, also with coordination responsibilities, in Research and Development activities, defining, organizing, and overseeing the activities necessary for the improvement and innovation of products.

Competencies associated with the role

Functional and structural design using advanced digital techniques (CAD, FEM) for mechanical elements and complex systems, both static and dynamic, in stationary or transient conditions, in linear and non-linear contexts.

Career opportunities

Technical and design offices of industrial companies and service companies.

Research and Development departments in industrial companies and service companies.

Mechanical Engineer for Production in Industrial Plants

Function in a work context

They choose and implement strategies for operating production plants, with a specific focus on highly automated processes like flexible production systems. They define optimal management strategies, considering economic and organizational aspects, and oversee industrial maintenance and safety activities.

They also participate, with coordination responsibilities, in Research and Development activities, defining, organizing, and overseeing the activities necessary for the improvement and innovation of products.

Competencies associated with the role

Collaboration, often with coordination responsibilities, in production planning and material management in manufacturing companies.

Identification of production systems based on the type of product and production volumes.

Technical and economic management of an industrial order.

Defining programming strategies for numerically controlled processing, assembly, and testing machines.

Career opportunities

Management and operation departments of production systems in industrial companies.

Research and Development departments in industrial companies and service companies.

Art. 4

Admission requirements and knowledge required for access to the Degree Program[1]

To enroll in a Master's Degree Course, a student must hold a Bachelor's Degree or a three-year university diploma, or another qualification obtained abroad and recognized as valid. Specific curricular requirements and a mandatory verification of the student's personal preparation are also required. This includes the possession of adequate language skills, which will be assessed according to criteria defined in the regulations of the Master's Degree Course.

In particular, for enrollment in the Master's Degree in Mechanical Engineering for Design and Production, the curricular requirements include having a degree in the class of degrees in Industrial Engineering (Class 10 of DM 509/99 and L-9 of Ministerial Decree 270/04) or an equivalent qualification, or having earned at least 90 CFU in specific scientific-disciplinary sectors, as follows:

At least 40 CFU in the sectors:

MATH-02/A (ex MAT/02) - Algebra
MATH-02/B (ex MAT/03) - Geometry
MATH-03/A (ex MAT/05) - Mathematical Analysis
MATH-03/B (ex MAT/06) - Probability and Mathematical Statistics
MATH-04/A (ex MAT/07) - Mathematical Physics
MATH-05/A (ex MAT/08) - Numerical Analysis
MATH-06/A (ex MAT/09) - Operations Research
STAT-01/A (ex SECS-S/01) - Statistics
STAT-01/B (ex SECS-S/02) - Statistics for Experimental and Technological Research
IINF-05/A (ex ING-INF/05) - Information Processing Systems
PHYS-03/A (ex FIS/01 + FIS/03) - Experimental Physics + Physics of Matter
CHEM-03/A (ex CHIM/03) - General and Inorganic Chemistry
CHEM-04/A (ex CHIM/05) - Science and Technology of Polymeric Materials
CHEM-06/A (ex CHIM/07) - Principles of Chemistry for Applied Technologies

At least 50 CFU in the sectors:

CEAR-06/A (ex ICAR/08) – Structural Mechanics
IIND-01/D (ex ING-IND/04) - Aerospace Structures and Constructions
IIND-06/A (ex ING-IND/08) - Fluid Machinery
IIND-06/B (ex ING-IND/09) - Energy Systems And Power Generation
IIND-07/A (ex ING-IND/10) - Thermal Engineering And Industrial Energy Systems
IIND-07/B (ex ING-IND/11) - Building Physics And Building Energy Systems
IMIS-01/A (ex ING-IND/12) - Mechanical And Thermal Measurements
IIND-02/A (ex ING-IND/13) - Applied Mechanics
IIND-03/A (ex ING-IND/14) - Mechanical Design And Machine Construction
IIND-03/B (ex ING-IND/15) - Design Methods For Industrial Engineering
IIND-04/A (ex ING-IND/16) - Manufacturing Technology And Systems
IIND-05/A (ex ING-IND/17) - Industrial Mechanical Systems Engineering
IIND-03/C (ex ING-IND/21) - Metallurgy
IMAT-01/A (ex ING-IND/22) - Materials Science And Technology
IIET-01/A (ex ING-IND/31) - Electrical Engineering
IIND-08/A (ex ING-IND/32) - Power Electronic Converters, Electrical Machines And Drives
IEGE-01/A (ex ING-IND/35) - Business And Management Engineering

[1] Artt. 7, 13, 14 of the University Didactic Regulations.

At least 24 CFU in the sectors:

IIND-02/A (ex ING-IND/13) - Applied Mechanics
IIND-03/A (ex ING-IND/14) - Mechanical Design And Machine Construction
IIND-03/B (ex ING-IND/15) - Design Methods For Industrial Engineering
IIND-04/A (ex ING-IND/16) - Manufacturing Technology And Systems
IIND-05/A (ex ING-IND/17) - Industrial Mechanical Systems Engineering

Art. 5
Procedures for access to the Degree Program (CdS)

1. The CCD of the Degree Program normally regulates the admission criteria and any scheduling of enrolments, except in cases subject to different provisions of law[2].
2. Verification of personal preparation is always mandatory, and only students who meet the curricular requirements can access it.
3. The verification of curricular requirements is conducted by the CCD through the analysis of the student's previous academic records. Enrollment in the Master's Degree in Mechanical Engineering for Design and Production is not allowed if the minimum curricular requirements are not met. If the minimum requirements are not satisfied, the CCD assists the student by prescribing enrollment in individual courses offered by the University and passing the relevant exams before registration.

   With reference to the requirement of having at least 24 CFU in the sectors IIND-02/A, IIND-03/A, IIND-03/B, IIND-04/A, IIND-05/A, the CCD may identify equivalencies for credits earned in different scientific-disciplinary sectors, based on the content of specific courses from the student's previous academic career, provided these are closely related to the topics of the aforementioned sectors.

   Students holding an L-9 degree or equivalent but with fewer than 24 CFU in the sectors IIND-02/A, IIND-03/A, IIND-03/B, IIND-04/A, IIND-05/A, will be admitted to the Master's Degree program with the recommendation of an Individual Study Plan that includes a specific alignment path, without an increase in the total number of CFU.

   After verifying the curricular requirements, the adequacy of the student's personal preparation, including their language proficiency, must also be verified. This verification is governed by the CCD according to guidelines established uniformly for all Master's Degree Programs within the Polytechnic School and Basic Sciences.

   For this purpose, the weighted average (**M**) is calculated based on the CFU and the grades (in thirtieths) obtained in the exams required to earn the degree that grants access to the Master's Degree program. A student's personal preparation is considered adequate if **M ≥ 24.** Students who do not meet the weighted average requirement (M) will have to take a specific admission test. Information regarding the scheduling, procedures, and requirements for passing the test is provided on the Study Course website (http://meccanica.dii.unina.it/it/orientamento-lm).

   Regarding the verification of language skills, students who do not hold a qualification obtained by attending a study program delivered in Italian or English, and who do not have certifications or language qualifications attesting to their knowledge of Italian or English at least at level B1 of the Common European Framework of Reference (CEFR), must demonstrate adequate comprehension and conversation skills in either Italian or English through a proficiency test.

   Specifically, since to obtain the Master's Degree the student must be able to use a European Union language fluently, in addition to Italian, the study plan includes a sufficient number of CFU (at least 3) to acquire 'Additional language knowledge,' particularly in English. The attainment of this knowledge, at least at level B2, will be certified in accordance with the methods defined by the University's Language Center (www.cla.unina.it). Students already in possession of an English

[2] National programmed access is regulated by L. 264/1999 and subsequent amendments and supplements.

certificate at least at the B2 level upon registration may request its recognition for the purposes of Additional Language Knowledge, following procedures established by the Language Center.

Art. 6
Teaching activities and university training credit (Teaching activities and CFU)

Each training activity, prescribed by the CdS detail sheet, is measured in CFU. Each CFU corresponds to 25 hours of overall training commitment[3] per student and includes the hours of teaching activities specified in the curriculum as well as the hours reserved for personal study or other individual training activities.

For the Degree Program covered by this Didactic Regulations, the hours of teaching specified in the curriculum for each CFU, established in relation to the type of training activity, are as follows [4]:

- Lecture or guided teaching exercises: 8 hours per CFU;
- Seminar: 8 hours per CFU;
- Laboratory activities or fieldwork: 8 hours per CFU;

For internship activities, each credit corresponds to 25 hours of overall training commitment [5].

The CFU corresponding to each training activity acquired by the student is awarded by satisfying the assessment procedures (examination, pass mark) indicated in the Course sheet relating to the course/activity attached to these Didactic Regulations.

Art. 7
Description of teaching methods

The didactic activity is carried out in modality of Type A: Conventional Study Course

If necessary, the CCD decides which courses also include teaching activities offered online.

Some courses may also take place in seminar form and/or involve classroom exercises, language, and computer laboratories.

Detailed information on how each course is conducted can be found in the course sheets.

Art. 8
Testing of training activities[6]

1. The CCD, within the prescribed regulatory limits[7], establishes the number of examinations and other means of assessment that determine the acquisition of credits. Examinations are individual

[3] According to Art. 5, par. 1 of Italian Ministerial Decree No 270/2004, "25 hours of total commitment per student correspond to university training credits; a ministerial decree may justifiably determine variations above or below the aforementioned hours for individual classes, by a limit of 20 per cent".

[4] The number of hours considers the instructions in Art. 6, par. 5 of the RDA: "of the total 25 hours, for each CFU, are reserved: a) 5 to 10 hours for lectures or guided teaching exercises; b) 5 to 10 hours for seminars; c) 8 to 12 hours for laboratory activities or fieldwork, except in the case of training activities with a high experimental or practical content, and subject to different legal provisions or different determinations by DD.MM.".

[5] For Internship activities (Inter-ministerial Decree 142/1998), subject to further specific provisions, the number of working hours equal to 1 CFU may not be less than 25.

[6] Article 22 of the University Didactic Regulations.

[7] Pursuant to the DD.MM. 16.3.2007 in each Degree Programs the examinations or profit tests envisaged may not be more than 20 (Bachelor's Degrees; Art. 4. par. 2), 12 (Master's Degrees; Art. 4, par. 2), 30 (five-year single-cycle Degrees) or 36 (six-year single-cycle Degrees; Art. 4, par. 3). Pursuant to the RDA, Art. 13, par. 4, "the assessments that constitute an eligibility evaluation for activities referred to in Art. 10, par. 5, letters c), d), and e) of Ministerial Decree no. 270/2004, including the final examination for obtaining the degree, are excluded from the calculation." For Master's Degree Program and single-cycle Master's Degree Program, however, pursuant to the RDA, Art. 14, par. 7, "the assessments that constitute a progress evaluation for activities referred to in Art. 10, par. 5, letters d) and e) of Ministerial Decree

and may consist of written, oral, practical, graphical tests, term papers, interviews, or a combination of these modes.

2. The examination procedures published in the course sheets and the examination schedule will be made known to students before the start of classes on the Department's website.[8]
3. Examinations are held subject to booking, which is made electronically. In case the student is unable to book an exam for reasons that the President of the Board considers justifiable, the student may still be admitted to the examination, following those students already booked.
4. Before examination, the President of the Board of Examiners verifies the identity of the student, who must present a valid photo ID.
5. Examinations are marked out of 30. Examinations involving an assessment out of 30 shall be passed with a minimum mark of 18; a mark of 30 may be accompanied by honours by a unanimous vote of the Board. Examinations are marked out of 30 or with a simple pass mark. Assessments following tests other than examinations are marked out with a simple pass mark.
6. Oral exams are open to the public. If written tests are scheduled, the candidate has the right to see his/her paper(s) after correction.
7. The University Didactic Regulations govern Examination Boards [9].

Art. 9
Degree Program structure and Study Plan

1. The legal duration of the Degree Program is 2 years. It is also possible to enrol based, on the contract, in compliance with the provisions of Article 24 of the RDA and according to the criteria and procedures defined in the following paragraph.
   The student must acquire 120 CFU[10], attributable to the following Types of Training Activities (TAF):
   B) characterising,
   C) related or complementary,
   D) at the student's choice[11],
   E) for the final exam,
   F) further training activities.
2. The degree is awarded after having acquired 120 CFU by passing examinations, not exceeding 12, including the final[12], and the performance of other training activities.

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no. 270/2004 are excluded from the exam count; the final examination for obtaining the Master's Degree and single-cycle Master's Degree is included in the maximum number of exams".

[8] Reference is made to Art. 22, par. 8, of the University Teaching Regulations, which states that "the Department or School ensures that the dates for progress assessments are published on the portal with reasonable advance notice, which normally cannot be less than 60 days before the start of each academic period, and that an adequate period of time is provided for exam registration, which is generally mandatory."

[9] Reference is made to Art. 22, paragraph 4 of the RDA according to which "Examination Boards and other assessments committees are appointed by the Director of the Department or by the President of the School when provided for in the School's Regulations. This function may be delegated to the CCD Coordinator. The Commissions comprise of the President and, if necessary, other professors or experts in the subject. In the case of active courses, the President is the course instructor, and in such cases, the Board can validly make decisions even in the presence of the President alone. In other cases, the President is a professor identified at the time of the Board's appointment. In the comprehensive evaluation of the overall performance at the conclusion of an integrated course, the professors in charge of the coordinated modules participate, and the President is appointed when the Commission is appointed."

[10] The total number of CFU for the acquisition of the relevant degree must be understood as follows: six-year single-cycle Degree, 360 CFU; five-year single-cycle Degree, 300 CFU; Bachelor's Degree, 180 CFU; Master's Degree, 120 CFU.

[11] Corresponding to at least 12 ECTs for Bachelor's Degrees and at least 8 CFU for Master's Degrees (Art. 4, par. 3 of Ministerial Decree 16.3.2007).

[12] Art. 14, par. 7 of the University Didactic Regulations ('the final exam for the Master's Degree is included in the calculation of the maximum number of exams').

Unless otherwise provided for in the legal framework of University studies, examinations taken as part of basic, characterising, and related or supplementary activities, as well as activities chosen autonomously by the student (TAF D) are taken into consideration for counting purposes. Examinations or assessments relating to activities independently chosen by the student may be taken into account in the overall calculation corresponding to one unit[13]. Tests constituting an assessment of suitability for the activities referred to in Article 10, paragraph 5, letters d) and e) of Ministerial Decree 270/2004[14] are excluded from the count. Integrated Courses comprising of two or more modules are subject to a single examination.

3. In order to acquire the CFU relating to independent choice activities, the student is free to choose among all the Courses offered by the University, provided that they are consistent with the training project. This consistency is assessed by the Didactic Coordination Commission. Also, for the acquisition of the CFU relating to autonomous choice activities, the "passing the exam or other form of profit verification" is required (Art. 5, par. 4 of Ministerial Decree 270/2004).
4. The study plan summarises the structure of the Degree Program, listing the envisaged teachings broken down by course year and, in case, by curriculum. At the end, the propedeuticities envisaged by the Degree Program are listed. The study plan offered to students, with an indication of the scientific-disciplinary sectors and the area to which they belong, of the credits, of the type of educational activity, is set out in Annex 1 to these Didactic Regulations.
5. Pursuant to Art. 11, paragraph 4-bis, of Ministerial Decree 270/2004, it is possible to obtain the Degree according to an individual study plan that also includes educational activities different from those specified in the Didactic Regulations, as long as they are consistent with the CdS detail sheet of the academic year of enrollment. The individual study plan is approved by CCD.
6. To promote the training of engineering professionals with a strong interdisciplinary character, students enrolled in the Master's Degree Course are offered the opportunity to participate, in partial overlap with the Master's Degree studies, in the Minor training path in "Applied machine Learning", governed by a specific Regulation reported in Annex 3. It is obtained by submitting an individual study plan that provides for the acquisition of at least 6 additional extracurricular CFU (126 CFU in total), together with an appropriate choice of at least 21 curricular CFU. Annex 1 to the Degree Course Regulations specifies, for each of the aforementioned paths, the specific curricular and extracurricular training activities (and the related types, TAF) necessary for its achievement. Further information on the Minor is reported in Annex 3.

Art. 10
Attendance requirements[15]

1. In general, attendance of lectures is strongly recommended but not compulsory

[13] Pursuant to the D.M. 386/2007.

[14] Art. 10, par. 5 of Ministerial Decree. 270/2004: "In addition to the qualifying training activities, as provided for in paragraphs 1, 2 and 3, Degree Programs shall provide for: a) training activities autonomously chosen by the student as long as they are consistent with the training project [TAF D]; b) training activities in one or more disciplinary fields related or complementary to the basic and characterising ones, also with regard to context cultures and interdisciplinary training [TAF C]; c) training activities related to the preparation of the final exam for the achievement of the degree and, with reference to the degree, to the verification of the knowledge of at least one foreign language in addition to Italian [TAF E]; d) training activities, not envisaged in the previous points, aimed at acquiring additional language knowledge, as well as computer and telematic skills, relational skills, or in any case useful for integration in the world of work, as well as training activities aimed at facilitating professional choices, through direct knowledge of the job sector to which the qualification may give access, including, in particular, training and guidance programs referred to in Decree no. 142 of 25 March 1998 of the Ministry of Labour [TAF F]; e) in the hypothesis referred to in Article 3, paragraph 5, training activities relating to internships and apprenticeships with companies, public administrations, public or private entities including those of the third sector, professional orders and colleges, on the basis of appropriate agreements".

[15] Art. 22, par. 10 of the University Didactic Regulations.

In the case of individual courses with compulsory attendance, this option is indicated in the relative teaching/activity course sheet available in Annex 2.

2. If the lecturer envisages a different syllabus modulation for attending and non-attending students, this is indicated in the individual Course details published on the CdS web page and on the teacher's UniNA website.
3. Attendance at seminar activities that award training credits is compulsory. The relative modalities for the attribution of CFU are the responsibility of the CCD.

Art. 11
Prerequisites and prior knowledge

1. The list of incoming and outgoing propedeuticities (necessary to sit a particular examination) can be found at the end of Annex 1 and in the teaching/activity course sheet (Annex 2).
2. Any prior knowledge deemed necessary is indicated in the individual Teaching Schedule published on the course webpage and on the teacher's UniNA website.

Art. 12
Degree Program Calendar

The Degree Program calendar can be found on the Department's website well before the start of the activities (Art. 21, par. 5 of the RDA).

Art. 13
Criteria for the recognition of credits earned in other Degree Programs in the same Class[16]

For students coming from Degree Programs of the same Class, the Didactic Coordination Commission ensures the full recognition of CFU, when associated with activities that are culturally compatible with the training Degree Program, acquired by the student at the originating Degree Program, according to the criteria outlined in Article 14 below. Failure to recognise credits must be adequately justified. It is without prejudice to the fact that the number of credits relating to the same scientific-disciplinary sector directly recognised by the student may not be less than 50% of those previously achieved.

Art. 14
Criteria for the recognition of credits acquired in Degree Programs of different classes, in university or university-level Degree Programs, through single courses, at online Universities and in international Degree Programs[17]; criteria for the recognition of credits acquired in extra-curricular activities

1. With regard to the criteria for the recognition of CFU acquired in Degree Programs of different Classes, in university or university-level Degree Programs, through single courses, at online Universities and in International Degree Programs, the credits acquired are recognised by the CCD on the basis of the following criteria:
   - analysis of the activities carried out;
   - evaluation of the congruity of the disciplinary scientific sectors and of the contents of the training activities in which the student has earned credits with the specific training objectives of the Degree Program and of the individual training activities to be recognised.

[16] Art. 19 of the University Didactic Regulations.
[17] Art. 19 and Art. 27, par.6 of the University Didactic Regulations.

Recognition is carried out up to the number of credits envisaged by the didactic system of the Degree Program. Failure to recognise credits must be adequately justified. Pursuant to Art. 5, par. 5-bis, of Ministerial Decree 270/2004, it is also possible to acquire CFU at other Italian universities on the basis of agreements established between the concerned institutions, in accordance with the regulations current at the time [18].

2. Any recognition of CFU relating to examinations passed as single courses may take place within the limit of 36 CFU, upon request of the interested party and following the approval of the CCD. Recognition may not contribute to the reduction of the legal duration of the Degree Program, as determined by Art. 8, par. 2 of Ministerial Decree 270/2004, except for students who enrol while already in possession of a degree of the same level[19].
3. With regard to the criteria for the recognition of CFU acquired in extra-curricular activities, pursuant to Art. 3, par. 2, of Ministerial Decree (D.M.) 931/2024, within the limit of 24 CFU, the following activities may be recognised (Art. 2 of D.M. 931/2024):
   - Professional knowledge and skills, certified in accordance with the current regulations as well as knowledge and skills acquired in post-secondary-level training activities.
   - Training activities carried out in the cycles of study at the public administration training institutions as well as knowledge and skills acquired in post-secondary-level training activities, which the University contributed to developing and implementing.
   - Achievement of an Olympic or Paralympic medal or the title of absolute world champion, absolute European champion or absolute Italian champion in disciplines recognized by the Italian National Olympic Committee or the Italian Paralympic Committee.

Art. 15
Criteria for enrolment in individual teaching courses

Enrolment in individual teaching courses, provided for by the University Didactic Regulations[20], is governed by the "University Regulations for enrolment in individual teaching courses activated as part of the Degree Program"[21].

[18] Art. 6, par. 9 of the University Didactic Regulations.
[19] Art. 19, par. 4 of the University Didactic Regulations.
[20] Art. 19, par. 4 of the University Didactic Regulations.
[21] R.D. No. 348/2021.

Art. 16
Features and modalities for the final examination

The Master's Degree in Mechanical Engineering for Design and Production is awarded after passing a final exam, which involves the evaluation by an academic committee of the Master's thesis. The thesis is developed by the student under the guidance of one or more university supervisors, and may also involve external experts who are not affiliated with the University. The thesis may focus on theoretical, methodological, numerical, or experimental activities. Work for the thesis can also be conducted at external research laboratories or within companies and institutions, both in Italy and abroad, provided that it is part of a guided learning process supervised by a university instructor. External tutors who have assisted the student in specific areas of their educational journey may be invited to the graduation session as co-supervisors, although they will not be part of the final examination committee. The written thesis and the discussion may be presented in English, and should demonstrate the work done, mastery of the subject, maturity, the ability to work independently, and a good level of communication skills, including the effective use of IT tools.
The final exam is publicly defended before a committee chaired by the Coordinator of the Study Course, or their delegate, and consists of a presentation of the work completed under the guidance of a faculty advisor, followed by a discussion with the members of the committee. During the session, the candidate presents the thesis, which must be available in the room. The candidate may use audio-visual aids to summarize their work or, alternatively, provide a summary booklet to be distributed to each member of the committee. At the end of the presentation, each faculty member may ask questions and make comments on the thesis. The presentation typically lasts 15 minutes.

Art. 17
Guidelines for traineeship and internship

1. Students enrolled in the Degree Program may decide to carry out internships or training periods with organisations or companies that have an agreement with the University. Traineeship and internship are compulsory and contribute to the award of credits for the other training activities chosen by the student and included in the study plan, as provided for by Art. 10, par. 5, letters d) and e), of Ministerial Decree 270/2004[22].
2. The CCD regulates the modalities and characteristics of traineeship and internship with specific regulations.
3. The University of Naples Federico II, through University Internship Office (http://www.unina.it/didattica/tirocini-studenti), the COINOR (Center for Innovation and Knowledge Transfer) - Internship Section (http://www.orientamento.unina.it/tirocini-post-laurea/) and the University placement service (https://www.jobservice.unina.it) ensures constant contact with the world of work to offer students and graduates of the University concrete opportunities for internships and work experience and to promote their professional integration.

Art. 18
Disqualification of student status[23]

A student who has not taken any examinations for eight consecutive academic years incurs forfeiture unless his/her contract stipulates otherwise. In any case, forfeiture shall be notified to the student by certified e-mail or other suitable means attesting to its receipt.

[22] Traineeships ex letter d) can be both internal and external; traineeships ex letter e) can only be external.
[23] Art. 24,par. 5 of the University Didactic Regulations.

Art. 19
Teaching tasks, including supplementary teaching, guidance, and tutoring activities

1. Professors and researchers carry out the teaching load assigned to them in accordance with the provisions of the RDA and the Regulations on the teaching and student service duties of professors and researchers and on the procedures for self-certification and verification of actual performance[24].
2. Professors and researchers must guarantee at least two hours of reception every 15 days (or by appointment in any case granted no longer than 15 days) and, in any case, guarantee availability by e-mail.
3. The tutoring service has the task of orienting and assisting students throughout their studies and of removing the obstacles that prevent them from adequately benefiting from attending courses, also through initiatives tailored to the needs and aptitudes of individuals.
4. The University ensures guidance, tutoring and assistance services and activities to welcome and support students. These activities are organised by the Schools and/or Departments under the coordination of the University, as established by the RDA in Article 8.

Art. 20
Evaluation of the quality of the activities performed

1. The Didactic Coordination Commission implements all the quality assessment forms of teaching activities envisaged by the regulations in force according to the indications provided by the University Quality Presidium.
2. In order to guarantee the quality of teaching to the students and to identify the needs of the students and all stakeholders, the University of Naples Federico II uses the Quality Assurance (QA)[25] System, developed in accordance with the document "Self-evaluation, Evaluation and Accreditation of the Italian University System" of ANVUR, using:
   - surveys on the degree of placement of graduates into the world of work and on post-graduate needs;
   - data extracted from the administration of the questionnaire to assess student satisfaction for each course in the curriculum, with questions relating to the way the course is conducted, teaching materials, teaching aids, organisation, facilities.

   The requirements deriving from the analysis of student satisfaction data, discussed, and analysed by the Teaching Coordination Committee and the Joint Teachers' and Students' Committee (CPDS), are included among the input data in the service design process and/or among the quality objectives.
3. The QA System developed by the University implements a process of continuous improvement of the objectives and of the appropriate tools to achieve them, ensuring that planning, monitoring, and self-assessment processes are activated in all the structures to allow the prompt detection of problems, their adequate investigation, and the design of possible solutions.

[24] R.D No. 2482//2020.

[25] The Quality Assurance System, based on a process approach and adequately documented, is designed in such a way as to identify the needs of the students and all stakeholders, and then translate them into requirements that the training offer must meet.

Art. 21
Final Rules

The Department Council, on the proposal of the CCD, submits any proposals to amend and/or supplement these Rules for consideration by the Academic Senate.

Art. 22
Publicity and Entry into Force

1. These Rules and Regulations shall enter into force on the day following their publication on the University's official notice board; they shall also be published on the University website. The same forms and methods of publicity shall be used for subsequent amendments and additions.
2. Annex 1 (CdS structure), Annex 2 (Teaching/Activity course sheet) and Annex 3 (Minor in Applied Machine Learning) are integral parts of this Didactic Regulations.