



## DIDACTIC REGULATIONS OF THE DEGREE PROGRAM TRANSPORTATION ENGINEERING AND MOBILITY

### CLASS LM-23

**School:** Polytechnic and Basic Sciences

**Department:** Civil, Building and Environmental Engineering (DICEA)

**Regulations in force since the academic year 2024-2025**

### ACRONYMS

CCD	[Commissione di Coordinamento Didattico]	Didactic Coordination Commission
CdS	[Corso/i di Studio]	Degree Program
CPDS	[Commissione Paritetica Docenti-Studenti]	Joint Teachers-Students Committee
OFA	[Obblighi Formativi Aggiuntivi]	Additional Training Obligations
SUA-CdS	[Scheda Unica Annuale del Corso di Studio]	Annual single form of the Degree Program
RDA	[Regolamento Didattico di Ateneo]	University Didactic Regulations

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## Art. 1 Object

1. These Didactic Regulations govern the organizational aspects of the CdS in Transportation Engineering And Mobility (Ingegneria dei Trasporti e della Mobilità – class LM-23). The CdS in Transportation Engineering And Mobility is hinged in the Department of Civil, Building and Environmental Engineering (Dipartimento di Ingegneria Civile, Edile e Ambientale – DICEA) at the Università degli Studi di Napoli Federico II (hereafter *University*). The CdS is taught in English. The CdS is taught in mixed (online or in-presence) mode.
2. The CdS is governed by the Didactic Coordination Commission (CCD), according to Art. 4 of the RDA.
3. The CdS adopts an Admission Commission, which examines the students' applications for accessing the Study Program. The Commission comprises the Director of the Study Program and three other members appointed by the CCD.
4. The CdS adopts a Quality Insurance Management Team (Gruppo di gestione AQ), which comprises the Director of the Study Program, the responsible for the orientation, the responsible for the quality insurance, the responsible for the internationalization, and a representative of the students.
5. The Didactic Regulation complies with the relevant legislation in force, the Statute of the University of Naples Federico II, and the RDA.

## Art. 2 Training objectives

The educational objectives of the Master's Degree in Transportation Engineering and Mobility respond to the transformations taking place in the context of transportation engineering to the prospects of the coming years. The study program provides a deep understanding of the transportation application domain, its specificities, the physics of the system, and the rules and behaviors of users and economic actors. The study program is aimed at building a solid interdisciplinary educational foundation that enables the master's degree graduate to acquire the cultural and technical tools to:

- 1) plan, program, and control transportation systems and services and transportation infrastructure networks, as well as design and implement programs to support the adaptation and maintenance of transportation networks and services and increase their efficiency, safety, and resilience, even under emergency conditions and for the management of exceptional events;
- 2) analyze complex situations and problems, imagine and screen solutions, and intervene in the management of transportation services and infrastructure, road, rail, port, airport, and intermodal passenger and freight terminals and nodes;
- 3) apply design techniques and devise and implement programs for the maintenance of road superstructure and for the reuse of road materials, for the life cycle management of infrastructure and materials, for digital modeling of infrastructure and its monitoring and management;
- 4) declining road design in the direction of environmental, economic, and social sustainability, including road safety;
- 5) interpret, predict, and manage at a high level the technical and behavioral transformations in transportation systems, identifying emerging business models in the field of sustainable mobility, and dealing with complex, integrated, and shared transportation and mobility services, being able to identify opportunities and impacts arising from the application of technological innovation in the field of private, collective and multimodal mobility, as well as in the production and marketing of transportation services for people and goods

6) find design and test solutions in the field of Intelligent Transportation Systems, transportation means, and systems with increasing levels of automation, with particular reference to solutions for Cooperative Connected and Automated Mobility (CCAM), being able to test, validate, and certificate in realistic traffic environments assisted, automated and connected driving systems and advanced systems for interoperability between vehicles and infrastructures (C-ITS services and Smart Roads).

To achieve the set objectives, which are characterized by a considerable cultural breadth and by a very significant interdisciplinary nature, the course of studies provides a solid characterizing preparation, strongly focused on the civil sectors of transport engineering, roads, railways, and airports and of topography and cartography, which is flanked by a broad preparation in terms of disciplines for measurement, analysis, and decision support and disciplines related to industrial and enabling technologies, the latter particularly oriented towards Information and Communication Technologies. The course is completed by activities that the student can choose independently, as well as laboratory activities and final examination, which are strongly oriented towards the experimentation and solution of complex problems with relevance and rootedness in the real world and the operational context and which can be cumulated and carried out in the form of internships and placements. Characterizing activities, internships, and thesis activities are concentrated in the second year of the course.

In particular, in the field of measurement, analysis, and decision support, disciplines that prepare on measurement theory, statistical analysis, the processing of large volumes of data, the extraction of value from big data, and the application of machine learning methods are useful for the figure of the Master's degree student in Transportation Engineering and Mobility, on decision support through the techniques and methods of operations research and, in the case of a more works-oriented declination of the individually chosen training path, disciplines related to the analysis of the geological and geotechnical contexts on which transport infrastructures penetrate, as well as the analysis of the state of maintenance of the structures necessary for the realization of infrastructure networks. The activities of this group are divided between the first and second year. Finally, within the framework of the industrial and ICT disciplines and enabling technologies, knowledge in the fields of telecommunications (for telematics applications applied to transport), automation (for automatic mobility and, together with telecommunications and information processing systems, for cooperative and connected mobility) is useful; finally, due to the increasing relevance to the sustainability of transport systems, a significant educational contribution can come from the disciplines of electrical energy systems and electrical converters, machines and drives. The activities of this group are concentrated in the first year, with the aim of early transfer of the appropriate cognitive tools for a digitally aware approach.

The degree program is delivered in blended mode. Up to 30 CFU/ETCS can be delivered online for each year of the course, for an overall total of 60 CFU/ETSC, with the primary aim of facilitating the enrolment of non-EU international students, improving synergy with the complex processes of granting entry visas and facilitating and smoothing the processes of integration in academic activities.

### **Art. 3**

#### **Professional profile and work opportunities**

The master's degree graduate in Transportation Engineering and Mobility acts in highly innovative professional contexts, characterized by a significant propensity for the use of new technologies, where he or she serves as a highly qualified expert in the planning, programming, design, and operation of infrastructure, terminals, networks, services and technological and organizational processes, including highly innovative ones, related to the mobility of people and the transport and

distribution of goods. The duties of the master's degree graduate in Transportation Engineering and Mobility range widely and include:

- adaptation, maintenance, and operation under efficient and safe conditions of efficient, accessible, usable, and sustainable structures, infrastructures, facilities, and services aimed at satisfying settlement, productive, economic, and social functions;
- design, implementation, and control of complex networks consisting of infrastructure, services, and organizational and pricing systems to support modern, sustainable, safe, automated, and connected mobility behaviors of people and transportation and distribution of goods, as well as original and innovative solutions oriented in this direction;
- analysis, mathematical characterization, forecasting, control, and management of mobility demand, traffic flows, and outflow of vehicles, people and goods;
- support and guidance in the processes of digital transformation of transport infrastructures, including the design, implementation, and operation of Smart Roads, also realized through services based on the connection between vehicles and with infrastructures (driving services, traffic information and management of transport networks with cooperative logics);
- development and design of road safety, with reference to both infrastructure and active vehicle safety, also realized through cooperative communication and driving solutions;
- application to the fields of transport engineering of the paradigms of circular economy and reuse of materials;
- estimation, evaluation of the effects, and impacts assessment of the implementation of infrastructure and the introduction of technological innovation in the sector, as well as shared decision-making processes, including public consultation and involvement;
- design, management, and enhancement of transportation operators' services in a market of regulated competition and competition for customer attraction;
- conception, design, implementation, and management of solutions in the area of mobility as a service, modal integration, soft-mobility, and shared-mobility, as well as design of technological, organizational, and tariff systems and design/management of business development plans related to optimization of technical resources for service delivery;
- testing of increasingly automated driving solutions in realistic traffic contexts and evaluation of the effects of innovation in the sector in terms of runoff efficiency and opportunities for meeting mobility and transportation needs;
- design and operation of complex systems for Cooperative Connected and Automated Mobility (CCAM).

To perform his/her job functions, the master's degree graduate in Transportation Engineering and Mobility acquires domain-specific skills in transportation and mobility, with particular emphasis on the disciplines of transportation engineering, roads, railways and airports, and topography and cartography. In particular, the master's graduate in Transportation Engineering and Mobility owns skills related to vehicle and fleet location, positioning, navigation systems, and services. He/she can model the transportation services to carry out test-before-invest activities and assess the effect of modern technologies on transportation systems' safety, efficiency, and quality. The master's graduate also has expertise in infrastructure maintenance and operations, particularly in methodological and operational tools for road pavements and applying circular economy approaches in using road materials. The master's degree graduate has skills in modeling, analyzing, and forecasting demand for mobility and freight transport, for evaluating transportation investments, traffic control, designing and delivering of rail and mass transit services, freight transport, and logistics. The master's graduates in Transportation Engineering and Mobility deals with the digital transformation of infrastructure (smart roads), the delivery of C-ITS-type services for interoperability between vehicles and infrastructure, the test and validation of vehicles at

increasing levels of automation in realistic and complex mobility contexts and other topics in the field of Cooperative Connected and Automated Mobility.

Alongside transportation-related skills, the master's graduate in Transportation Engineering and Mobility also owns a broad knowledge in measurement, analysis, and decision-making, as well as ICT and industrial enabling technologies, data analysis and decision support, ICT and industrial technologies with an enabling function for the transformation of the transportation and mobility sector. He/she has knowledge and ability to apply the technologies related to computer networks and sensor networks to transportation, as well as cellular and short-range technologies for communication between vehicles and with infrastructures and pedestrians. The master's graduate in transportation engineering and mobility also knows techniques for analysing complex data, including extracting and adding value, thanks to machine learning and big-data techniques.

The training pathway is thus characterized by a robust interdisciplinary vocation that allows students to access a broad range of job opportunities, overcoming the limitations of an overly focused education with few cross-cutting and enabling skills. Job opportunities for the master's graduate in Transportation Engineering and Mobility are in the public administration responsible for mobility and transport, in organizational units dealing with transport infrastructure, networks, and services, and in large public and private companies involved in the production and management of mobility services, transport systems, and autonomous and connected vehicle fleets, in small and medium-sized companies with highly innovative characteristics in the mobility sector. The master's graduate in Transportation Engineering And Mobility works with highly specialized professional, intellectual, and scientific functions in transportation engineering, also assuming technical functions in the early stages of his/her career. More specifically, the knowledge, skills and abilities acquired by the master's degree graduate in Transportation Engineering and Mobility are believed to allow for very broad employment outlets, spanning a significant number of areas including: the use of vehicles and other industrial products as components of mobility systems; road and rail construction; intercity and urban passenger and freight rail transport; maritime and coastal, as well as inland waterway, passenger and freight transport; passenger and freight air transport; transportation support activities, including insurance and management consulting; the activities of architectural, engineering and other technical firms; technical testing and analysis; research and experimental development in the field of natural sciences and engineering; market research and opinion polling with reference to transportation and mobility; motor vehicle rental, including the new business models of car-sharing and bike-sharing and mobility-as-a-service; transportation support services for all businesses; and collective services offered by public administrations.

Career perspectives include : research and innovation departments in companies in the automotive supply chain, with reference to the development of automated and connected vehicles, integrated into traffic and mobility environments; transportation infrastructure construction companies, with reference to digital infrastructure modelling activities for life-cycle management and maintenance; companies and economic operators for the production, management and operation in the field of intelligent transportation systems, autonomous and connected mobility and vehicle fleets; companies, entities, consortia and agencies for the management and control of transportation systems; companies and operators of road, rail, port, airport and intermodal/multimodal passenger and freight terminals and nodes; as well as global and local operators of mobility and freight transport and distribution; concessionaires of modal and multimodal transport infrastructure, networks and services at different territorial levels; companies, operators, managers of transport hubs and responsible for mobility in commercial centres; traffic control operators for different modes of transport, as well as intermodal mobility and production/management of related specialized tools; innovative companies in the field of shared mobility and mobility as a service; companies of car-sharing, bike-sharing and other mobility services for people based on the management of vehicular fleets; players in the insurance industry, for the design and testing of new

business models for liability in contexts of autonomous driving, connected driving, mobility behaviours strongly oriented to sharing and intermodality/multimodality; public and private entities, companies and operators in the field of testing, validation, certification and homologation in realistic traffic environments for assisted, automated and connected driving systems and for advanced systems for interoperability between vehicles and infrastructures; engineering consulting companies in the automotive sector and more generally in the field of connected mobility; operators and companies in the field of tourist mobility; consulting firms operating in the field of economic, financial and sustainability assessment of investments and projects related to infrastructure networks in transport; holding companies and management departments of large rail, highway, aviation and road companies; public and private entities operating in the field of planning and management of large events involving the movement of people and vehicles and the optimization of vehicular and pedestrian flows; national, local, and supranational control and regulatory authorities; civil protection administrations, agencies, facilities, and operators for the purpose of developing, planning, and implementing programs to support the resilience of transportation infrastructure and networks, as well as emergency management programs and evacuation plans.

#### **Art. 4**

##### **Admission requirements and knowledge required for access to the Degree Program**

The prerequisite for access to the compulsory personal preparation test for admission to the Master's Degree Course in Transportation Engineering and Mobility is a degree in one of the classes L7, L8, L9, or another qualification obtained abroad that is recognized as suitable.

In the absence of these prerequisites, access to the personal preparation adequacy test will require at least the possession of a level 6 qualification referred to the European Qualifications Framework (EQF) and the possession of the following previous curricular requirements:

1. Activities corresponding to at least 36 ETCS in the disciplinary scientific sectors (SSDs):
  - a. INF/01
  - b. MAT/01 to MAT/09
  - c. SECS-S/02
  - d. CHIM/03
  - e. CHIM/07
  - f. FIS/01
  - g. FIS/07
2. Activities corresponding to at least 39 ETCS in the disciplinary scientific sectors (SSDs):
  - a. ICAR/01 to ICAR/09, with a minimum of 18 CFU/ETCS.
  - b. ING-INF/01 to ING-INF/05.
  - c. ING-INF/07
  - d. ING-IND/10
  - e. ING-IND/11
  - f. ING-IND/13 to ING-IND/16
  - g. ING-IND/22
  - h. ING-IND/31 to ING-IND/33
  - i. ING-IND/35

In the case of studies outside Italy, the correspondence between the required SSDs in curricular careers and the disciplinary field of the curricular activities already sustained will be explicitly evaluated and considered valid only for access to the compulsory verification of personal skills.

In all cases, possessing adequate language skills is required and, in particular, a level of English language proficiency no lower than level B2 of the Common European Framework of Reference for Languages (CEFR).

Compulsory assessment of personal preparation is carried out by the CCD or by a Commission of selected members of the CCD delegated for the purpose.

## **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 the case subject to different provisions of law.
2. A programmed access is applied with a yearly predetermined number of maximum admitted students to the degree program. The maximum allowed number of new accesses is established yearly by the CCD, with implicit confirmation of the one of the previous year in case a new limit is not established. For the first year of the study program being in force, the maximum number of allowed yearly accesses is fixed at 100.
3. Verification of personal preparation is always mandatory, and only students who meet the curricular requirements can access it.
4. Verification of personal preparation occurs first and in all cases concerning possessing adequate language skills; particularly, an English language proficiency level of not less than B2 of the Common European Framework of Reference is required. In addition, for candidates who exceed the curricular requirements of art.4, the personal preparation is considered automatically verified in the case of an average of the marks (out of 30) achieved in the profit examinations and in any assigned curricular integrations - weighed based on the relative consistencies in CFU/ETCS - of not less than 27 out of 30.; automatic admission proceeds for such candidates. For marks acquired in educational systems that do not provide for marking on an out-of-30 base, evaluations must be made after converting curricular marks into out-of-30 units. Requests for admission to the Degree Program by students who do not meet the criteria for automatic admission will be evaluated in the unquestionable judgment of the CCD by taking into consideration the profit marks obtained in characterizing subjects of their bachelor's curriculum, as well as by eventually arranging for personal assessment via interviews, tests, and others, aimed at verifying the adequacy of the personal preparation. In cases the CCD assesses the personal preparation of the candidate as insufficient, it may suggest curricular supplementation before a reiteration of the application for the selection. Depending on the extent and nature of the highlighted inadequacies, the following options are applicable:
  - a. curricular integrations to be made before enrolling, according to Article 6 paragraph 1 of the Ministerial Decree of March 16, 2007, by enrolling in individual teaching courses activated in the University of Naples Federico II and passing the relevant profit examinations, according to Article 19 paragraph 4 of the University Didactic Regulation under DR/2023/1845 of 18/May/2023 ([http://www.unina.it/documents/11958/37773483/DR\\_1845\\_2023\\_nuovo\\_RDA.pdf](http://www.unina.it/documents/11958/37773483/DR_1845_2023_nuovo_RDA.pdf));
  - b. enrolling in a bachelor's degree of the University of Naples Federico II that has the characteristics to give automatic access to the Degree Program in Transportation Engineering and Mobility, with an abbreviated path and assignment of a Study Plan that provides the curricular integrations required for enrolment in the Degree Program in Transportation Engineering and Mobility;
  - c. enrolling in the Degree Program in Transportation Engineering and Mobility, with the assignment of an individually determined Study Plan that provides for the curricular integrations required at the initial stage of the training course, according to Art. 6 paragraph 3 of Ministerial Decree March 16, 2007.



## **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/ETCS. Each CFU/ETCS corresponds to 25 hours of overall training commitment per student and includes the hours of teaching activities specified in the curriculum and 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/ETCS, established in relation to the type of training activity, are as follows:

- Lecture or guided teaching exercises: 8 hours per CFU/ETCS;
- Seminar: 8 to 12 hours per CFU/ETCS;
- Laboratory activities or fieldwork: 10 to 15 hours per CFU/ETCS;

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

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 mixed modality, with up to 60% of the activities that can be carried out in online mode. The CCD decides which courses also include teaching activities offered online. Some courses may also be 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**

1. The CCD, within the prescribed regulatory limits, establishes the number of examinations and other means of assessment determining the acquisition of CFU/ETCS. Examinations are individual 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 on the Degree Program website before classes start.
3. Examinations are held subject to booking, which is made electronically. If the student cannot book an exam for reasons that the President of the Board considers justifiable, the student may still be admitted to the examination, following those already booked.
4. Before examination, the President of the Board of Examiners verifies the student's identity, 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 honors 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.



## **Art. 9**

### **Degree Program Structure and Study Plan**

1. The legal duration of the Degree Program is 2 years  
The student must acquire 120 CFU/ETCS, attributable to the following Types of Training Activities (TAF – Tipologi di Attività Formative):  
B) characterising,  
C) related or complementary,  
D) at the student's choice,  
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 exam, and the performance of other training activities.  
Unless otherwise provided for in the legal framework of University studies, examinations taken as part of characterizing and related or supplementary activities, as well as activities chosen autonomously by the student (TAF D), are considered for counting purposes. Examinations or assessments relating to activities independently chosen by the student may be considered in the overall calculation corresponding to one unit. 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 are excluded from the count. Integrated Courses comprising two or more modules are subject to a single examination.
3. To acquire the CFU/ETCS 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. The Didactic Coordination Commission assesses this consistency. Also, to acquire the CFU relating to autonomous choice activities the "passing the exam or other form of profit verification" is required (Art. 5, c. 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 this case, by curriculum. In 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, and of the type of educational activity, is set out in Annex 1 to these Didactic Regulations.

## **Art. 10**

### **Attendance requirements**

1. In general, attendance at lectures is strongly recommended but not compulsory.  
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 the teacher's UniNA website.
3. Attendance at seminar activities that award training credits is compulsory. The relative modalities for the attribution of CFU/ETCS 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 the teacher's UniNA website.

## **Art. 12**

### **Degree Program Calendar**

The Degree Program calendar can be found on the Study Program and Department's websites well in advance of the start of the activities (Art. 21, c. 5 of the RDA).

## **Art. 13**

### **Criteria for the recognition of credits earned in other Degree Programs in the same Class**

For students coming from Degree Programs of the same class, the Didactic Coordination Commission ensures the full recognition of CFU/ETCS, 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. This 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.

## **Article 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; criteria for the recognition of credits acquired in extra-curricular activities**

1. With regard to the criteria for the recognition of CFU/ETCS 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.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.
2. Any recognition of CFU/ETCS 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, c. 2 of Ministerial Decree 270/2004, except for students who enrol while already in possession of a degree of the same level.
3. With regard to the criteria for the recognition of CFU/ETCS acquired in extra-curricular activities, within the limit of 12 CFU, the following activities may be recognised:
  - Professional knowledges, skills, and certified skills, taking into account the congruence of the activity carried out and/or of the certified skill with the aims and objectives of the Degree Program as well as the hourly commitment of the duration of the activity.
  - Knowledges and skills acquired in post-secondary-level training activities, which the University contributed to develop and implement.

## **Art. 15**

### **Criteria for enrolment in individual teaching courses**

Enrolment in individual teaching courses, provided by the University Didactic Regulations (art. 19, paragraph 4, [http://www.unina.it/documents/11958/37773483/DR\\_1845\\_2023\\_nuovo\\_RDA.pdf](http://www.unina.it/documents/11958/37773483/DR_1845_2023_nuovo_RDA.pdf)), is governed by the "University Regulations for enrolment in individual teaching courses activated as part of the Degree Program."

## **Article 16**

### **Features and modalities for the final examination**

The Master's Degree in Transportation Engineering and Mobility is subject to passing a final examination. The examination is based on assessing and evaluating the master's thesis by a Commission appointed by the CCD. The submitted thesis must be an original work by the students, under the guidance of one or more university rapporteurs and with the possible cooperation of experts, also gathered from outside the University. The thesis, characterized in any case by originality, may be elaborated within a culturally homogeneous and coherent path involving laboratory activities and elective courses; these activities may also be carried out in collaboration with qualified external subjects under appropriate agreement. The thesis must demonstrate theoretical and/or methodological and/or numerical and/or experimental activities and mastery of the topics covered. The thesis must show the ability of the student to work with originality and autonomously and with a high level of mastery in communication. The thesis must be written in English.

To qualify for the final examination, the student must acquire all the CFUs/ETCS stipulated in his or her study plan, minus those of the final examination. The final examination is public. The CCD appoints the Examination Committee, generally chaired by the Course Coordinator or his/her delegate. The examination involves the presentation of the Master's thesis work and subsequent discussion with members of the Committee. The use of projection tools and audiovisual aids is encouraged during the presentation and discussion. The presentation and discussion must be in English. The final examination must be passed with a maximum grade of one hundred and ten, with possible honors awarded unanimously by the Commission. The credit-weighted average of the grades of the curricular examinations, scaled up from the maximum value of one hundred and ten, shall be considered in the evaluation. The student's entire career, in terms of quality, continuity, and duration, may also be considered. The CCD may draft more detailed regulations to govern the manner of requesting and assigning rapporteurs, co-rapporteurs, and dissertation topics, as well as to establish any time and manner of requesting the dissertation from the CCD, any details of the evaluation procedures and anything else useful for regulating access and the conduct of the final examination. Any such regulations must be given the widest dissemination and may not be implemented until six months after they are issued.

## **Article 17**

### **Guidelines for traineeship and internship**

1. Students enrolled in the Degree Program may decide to carry out internships or training periods with organizations or companies that have an agreement with the University. These activities can also be carried out internally at the University. Internships and traineeships with external organizations or companies are not 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.
2. The CCD regulates the modalities and characteristics of traineeship and internship with a specific regulation.

3. The University of Naples Federico II, through the "Ufficio Tirocini Studenti", 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.

## **Article 18**

### **Disqualification of student status**

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.

## **Article 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.
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.

## **Article 20**

### **Evaluation of the quality of the activities performed**

1. The Didactic Coordination Commission implements all the forms of quality assessment 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) 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.

## **Article 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.

## **Article 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) and Annex 2 (Teaching/Activity course sheet) are an integral part of this Didactic Regulations.