

UNIVERSITY OF TRIESTE
ACADEMIC AND TEACHING REGULATIONS
for students enrolled in the academic year 2024/25

Master's degree programme in
Materials and Chemical Engineering for Nano, Bio, and Sustainable Technologies
Interclass degree programme – Classes LM-22 and LM-53

Art. 1 - Objective

1. These regulations define in detail the contents of the related General Regulations (*Ordinamento Didattico*) of the Master's degree programme in Materials and Chemical Engineering for Nano, Bio, and Sustainable Technologies, under art. 12, s. 1 of the Ministerial Decree no. 270/2004 on "Amendments to the regulation containing the rules concerning the teaching autonomy of universities".
2. The General Regulations and the organisation of the Master's degree are defined in respect of freedom of teaching and the rights and duties of lecturers and students.

Art. 2 - Contents of the Academic and Teaching Regulations

1. The Academic and Teaching Regulations define the implementation of the General Regulations of the degree course and its organisational aspects.
2. In accordance with art. 4, s. 2 of the Teaching Regulations of the University of Trieste, the Academic and Teaching Regulations define:
 - a) the list of modules (and their scientific sector), divided by year and their partition into sub-modules, and other teaching activities;
 - b) the method for carrying out laboratory and practical activities, and traineeships;
 - c) the expected learning outcomes (see annex F), the number of university credits (ECTS) and any prerequisites for modules and other teaching activities, all divided by year;
 - d) the curricula available to students and, where necessary, how to present the individual study plan;
 - e) the provisions on any compulsory attendance and/or any alternative learning plan for student workers and/or disabled people;
 - f) the entry requirements, the procedures to verify them at enrolment and any provisions on preparatory and supplementary activities aimed at fulfilling a conditional advancement;
 - g) the procedure for admission to the final examination and graduation;
 - h) the procedure for verification of knowledge of the foreign language at the required level;
 - i) the possible use of English as the teaching language for some modules.

Art. 3 - Structure and organisation of the Master's degree programme

The following documents and regulations set the organisation and management of the degree course:

- University Charter;
- Teaching Regulations of the University;
- General Regulations of the Master's degree;
- List of taught modules and other teaching activities;
- Annual Study Plan.

Art. 4 - General Regulations of the Master's degree programme

1. The General Regulations set the structure and organisation of the Master's degree programme. In particular, they contain:

- a) the name and the ministerial class to which it belongs;
- b) the expected learning outcomes of the programme in agreement with the European qualification framework;
- c) career opportunities in relation to the activities listed by ISTAT;
- d) the plan of teaching activities in agreement with the provisions of the ministerial class to which the course belongs;
- e) the number of ECTS of all teaching activities;
- f) the entry requirements and the procedure to verify them at enrolment;
- g) the method for carrying out the final examination and graduation;

2. The General Regulations can be found in the SUA (*Scheda Unica Annuale*) statement of the programme.

Art. 5 - Plan of teaching activities

1. The plan of teaching activities specifies:

- a) the list of taught modules, their scientific sectors and other teaching activities;
- b) the sub-modules into which a module may be potentially subdivided and their scientific sectors;
- c) the number of ECTS of each module or teaching activity;
- d) any progression rules between modules;

2. The plan of teaching activities can be found in the SUA statement of the programme.

Art. 6 - Annual study plan

The annual study plan is updated annually and can be found in Annex A that is reported also in the SUA statement of the programme.

Art. 7 – Admissions

In order to be enrolled students must meet specific curricular requirements and must be adequately prepared. Details can be found in Annex B.

Art. 8 – Award of the degree

1. In order to graduate a student will have to acquire 120 ECTS.

2. Given that each year conventionally corresponds to 60 ECTS, the duration of the programme is two years.

3. The degree can be awarded in less than two years should the student has acquired all 120 ECTS included in their study plan.

Art. 9 - Structure of the Master's degree programme

1. The Master's degree programme entails the following types of teaching activities:

- a) core teaching activities (teaching activity of type B - TAF B);
- b) teaching activities related to the core ones, also with reference to cross-disciplinary training (TAF C);
- c) optional teaching activities (TAF D);
- d) teaching activities related to the final examination and linguistic knowledge (TAF E);

- e) teaching activities to improve linguistic knowledge, any traineeships, computer skills, telematic and relational skills, and all skills useful for the professional career (TAF F).
2. The number of ECTS assigned to each of the listed activities is specified in Annex A.

Art. 10 – Laboratory and practical activities, and traineeships

Such activities are promoted and coordinated by members of the Board of Studies. More details can be found in Annex C.

Art. 10bis - Foreign Languages

Verification of proficiency in spoken and written English, at least equivalent to level B2 of the Common European Framework of Reference for Language Proficiency, is part of the assessment of the applicant's personal preparation. This competence can be taken from the Curriculum studiorum or from an appropriate certificate issued by a qualified institution recognised as valid by the University. In all other cases, admission is verified by a test prepared by the University.

Art. 11 - Teaching activities preparing for the final examination

1. In agreement with its learning outcomes and assigned number of ECTS, the final examination is an extensive project or methodological work presented together with a report (Master's dissertation). The graduating student will have to prove through the dissertation that they master the topic, they can work independently and can communicate effectively. The topic needs to be pertinent to the traineeship or to issues studied throughout the programme and will be developed with the supervision of an academic staff (supervisor) and, if necessary, with the help of co-supervisors; the latter may be an academic staff of an external expert, especially if the dissertation is written during a traineeship to the premises of an external partner (either a company or an institution other than the University of Trieste).
2. The dissertation is presented and discussed during a pre-graduation examination in front of a Board nominated by the Head of Department. The Board consists of at least 3 members, one of which is the supervisor; others members can be either academic staff or external lecturers or experts. The committee assesses the content and the presentation and marks (maximum 30 marks).
3. The final mark of the Master's degree programme (a mark out of 110) is calculated through following formula:

$$L = \frac{110}{30} \frac{N_{cr} * E + n * P}{N_{cr} + n} + \Delta$$

with

$$\Delta = t + d + l + c \quad \Delta = 0 \div 6$$

where

- N_{cr} sum of the number of ECTS of modules or teaching activities for which a mark is assigned;
- N number of ECTS of the final examination;
- E weighted average of the marks of modules or teaching activities for which a mark is assigned;
- P examination mark assigned by the Pre-graduation Board;
- Δ increment determined by:
 - t type of dissertation, with $t = 0; 1; 2$

- (0: literature-review; 1: design, workshop; 2: research project);
- d* duration of enrolment in the programme, with $d = 0; 1$
(0: duration > 2.5 years (i.e. beyond March session of Year 2); 1: all other cases);
- l* value based on number of marks “30 cum laude”, with $l = 0; 1; 2$
(0: no. “30 cum laude” < 4; 1: $4 \leq$ no. “30 cum laude” < 8; 2: no. “30 cum laude” \geq 8);
- c* additional mark assigned by the Graduation Board, with $c = 0; 1$.

The final mark *L* is rounded off (e.g. 107.49 becomes 107 and 107.50 becomes 108).

4. The number of ECTS assigned to the final examination is specified in Annex A.

Art. 12 - Examination progression

1. In order to guarantee an appropriate teaching and learning path, the progression between examinations must be respected in accordance with the Teaching Regulations of the University.
2. The list of progression of examinations can be found in Annex D.

Art. 13 - Specific curricula

1. Within the programme, modules and teaching activities can be combined to offer specific curricula and to fulfil different cultural or professional needs.
2. Any specific curricula can be found in Annex A.

Art. 14 - Submission of an individual study plan

1. As an alternative to the regular procedure, a student can present an individual study plan for each academic year which includes from a minimum of 48 to a maximum of 84 ECTS, including those foreseen in the study plan of the student in the previous year and not yet acquired, with the constraint that the number of ECTS corresponding to modules or other teaching activities for which attendance has yet to be acquired should not exceed 60.
2. The Board of Studies may allow students to replace their modules with other modules offered from the University of Trieste or from other programmes of foreign Universities (either Bachelor’s or Master’s degrees) based on the coherence with the expected learning outcomes of the programme and the number of ECTS.

Art. 15 - Assessment

1. *Criteria for the arrangement of examination boards.* The examination board consists of two members: the module leader and another expert that can be either an academic staff or an expert of the subject. Non-academic staff experts are authorised by the Departmental Council. If the module is composed of two or more sub-modules with different leaders, they all must be part of the examination board.
2. *Assessment of taught modules and other teaching activities.* Assessment can take place with either ongoing tests or a final test to be held at the end of the module or activity.
3. *Recording of the mark for examination composed of multiple tests.* When an examination is composed of multiple tests, recording of the mark is performed only when the final mark is available.
4. *Rules for repeating failed examinations during the same academic year.* Students can repeat a failed examination in all the exam sessions of the academic calendar.

Art. 16 - Mandatory attendance

Attendance is not mandatory with the exception of any mandatory activities specified for each course.

Art. 17

Abrogated.

Art. 18 - Criteria for recording ECTS for activities and skills obtained prior to the enrolment

The Board of Studies can recognise a number of ECTS for activities performed or skills obtained prior to the enrolment to the Master's degree, if such activities are deemed coherent with the teaching activities and the expected learning outcomes of the programme as well as the duration, as specified in Annex E.

Art. 19 - Minimum number of ECTS to be acquired by the student in an established lapse

Any requirements

Art. 20 - Nature of these Regulations

These Regulations are defined as Academic and Teaching Regulations under art. 12 of the Ministerial Decree no. 270/2004.

Annexes

Ann. A: Annual study plan

Ann. B: Entry requirements

Ann. C: Traineeships

Ann. D: Progression rules

Ann. E: Recognition of previously-acquired skills or qualifications

Ann. F: Learning outcomes and teaching activities: tuning matrix