# MASTER'S DEGREE IN PHYSICS/PHYSICS LM-17 class of Degree in "Physics"

#### Academic Year 2022-2023

# The Master's DegreeProgramme.

The Master's Degree Course (MDC) in "Physics", of class LM-17 "Physics", referred to in the Decree of 16 March 2007, is activated at the Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences of the University of Messina.

The MDC in Physics aims to ensure the graduated a high scientific and operational preparation in different fields of physics, in accordance with the qualifying training objectives that characterize the LM-17 class. In particular, the graduated will acquire:

a) a solid cultural preparation in the field of classical and modern physics and a good mastery of the scientific method of investigation;

b) an in-depth knowledge of modern measuring instruments and data analysis techniques;

c) an in-depth knowledge of mathematical and it support tools;

d) a high scientific and operational preparation in the disciplines that characterize the Master's Degree Programme;

c) a good knowledge, in written and oral form, of at least one language of the European Union in addition to Italian, with reference also to disciplinary lexicons;

f) a high ability to work with wide autonomy also assuming responsibilities for projects and structures.

The teaching organization of the CLM in "Physics" includes three different curriculum,

(a) **Condensed Matter Physics,** taught in English, is designed to obtain a solid preparation on the main technologies and methodologies of Condensed Matter Physics;

(b) **Applied**Physics, taught in Italian is designed to obtain a solid preparation on the main technologies and methodologies of Applied Physics in the field of Biophysics and Health Physics;

(c) **Nuclear and Particle Physics**, carried out inItalian, is designed to acquire a solid preparation on the main technologies and methodologies of Nuclear and Subnuclear Physics.

The training of master's graduates in Physics allows a wide range of employment opportunities in areas with a high scientific, technological and cultural content, related to physical disciplines. In particular: Research Institutes and Research Bodies in general, Universities, Training Centers, sectors of Industry and production of high technological content goods, Health, Public Administrations, School and Cultural Heritage, Development Consortia, public and private companies for the control and protection of the environment and the territory. In addition, the Curriculum in English allows you to operate also internationally, especially in the academic field and in research.

Useful information on CLM can also be found on the site: <u>https://www.unime.it/it/cds/physics</u>

# Duration and articulation of the Course.

The duration of the MDC in Physics is two years for a total of 120 University Credits (CFU). Each year of the course is divided into two semesters at the end of which there are evaluation tests in written and /or oral form. The student's annual hourly commitment, including individual study, varies according to the different commitment required of the student during the two years of the course. The annual hourly commitment of the frontal and laboratory teaching activity corresponds to the CREDITS attributed to the various courses according to the typology of the same according to the following indications:

Course typology	code	ORE/CFU
Lessons	Lez	6
Tutorials	that	12
laboratory	LAB	12

# Frequency and Preparatory.

Attendance at both lectures and laboratory lessons is strongly recommended but not mandatory, there are no preparatory studies between the various disciplines. It should be noted, however, that it is important that the examinations are dealt with in the order in which the various disciplines are proposed in the organization of studies. The teaching period of the lessons, exams and the final exam are established by the Educational Calendar approved annually and available on the institutional website at <a href="https://www.unime.it/it/cds/physics">https://www.unime.it/it/cds/physics</a>.

# Tutored.

The MDC assigns each new registered student a tutor, that is a professor who will follow him throughout the course.

# Method of admission.

The methods of admission to the Master's Degree in Physics are established in the Didactic Regulations of the Degree Course (Art.5).

The application for admission to the degree course is made using the procedure "online pre-registration" that can be found on the website www.unime.it student section of the University of Messina. The period for enrolment is May 2020 - September 2020.

### Part-time students.

Part-time students/workers are expected to register, for whom an alternative training course will be prepared.

### Study plan.

The choice of the various curricular training activities and the details of the training internship (art.11 of the Regulation) are chosen by the student. At the beginning of each academic year of reference, the student, through the ESSE3 platform, chooses the study plan.

Students wishing to follow the "Condensed Matter Physics" training course, provided in English, already in possession of the appropriate linguistic certification (level B2) will access the courses taught in English from the first semester.

All training activities must involve the acquisition of a number of CREDITS not less than 120. The student can take exams for additional courses, and the related CREDITS will remain registered in the student's career.

### Articulation of semesters.

Each year of the course is divided into two semesters. All courses are held within the single semester.

### Exam sessions.

The teaching period of the lessons, exams and the final exam are established by the educational calendar approved annually and can be consulted on the department's institutional website. The number of exam periods and their time distribution can be consulted on the Department's institutionalwebsite.

The interval between two successive appeals cannot normally be less than two weeks avoiding overlapping with the lesson periods. The exams passed on subjects of your choice other than those recommended in this document, and therefore available only at other Degree Courses, allow the acquisition of a maximum of 8 credits. The various activities of free choice of the student also fall within this maximum of 8 CREDITS.

In addition, two profit exam sessions reserved for non-course students and so-called "assimilated" (i.e. those students who have completed the frequencies of their courses but not yet enrolled in the first year out of course) are scheduled, one in the first semester and the other in the second semester. These confidential appeals will be scheduled in the months when there are no "ordinary" profit examination appeals.

# Graduation sessions.

The dates on which the graduation sessions are scheduled are established by the Educational Calendar approved annually and available on the department's institutional website in the Teaching section.

# Achievement of the master's degree.

To obtain the Master's Degree in Physics the student must have acquired all the credits with the exception of those assigned to the final exam.

The methods of admission to take the final exam, the criterion of evaluation of the final paper are established in the Didactic Regulations of the Degree Course (art. 13).

The performance of the final exams of the Master's Degree is public, as well as public is the act of proclaiming the final result. The procedure for carrying out the final exam includes the presentation of the thesis, also through multimedia support, and a discussion also with questions addressed to the student.

For all other informations not included in this document, please refer to the current legislation, in particular the university and MDC educational regulations.