Why enroll ?

DIDACTICS – Optimal numerical balance between students and instructors, highly qualified laboratories.

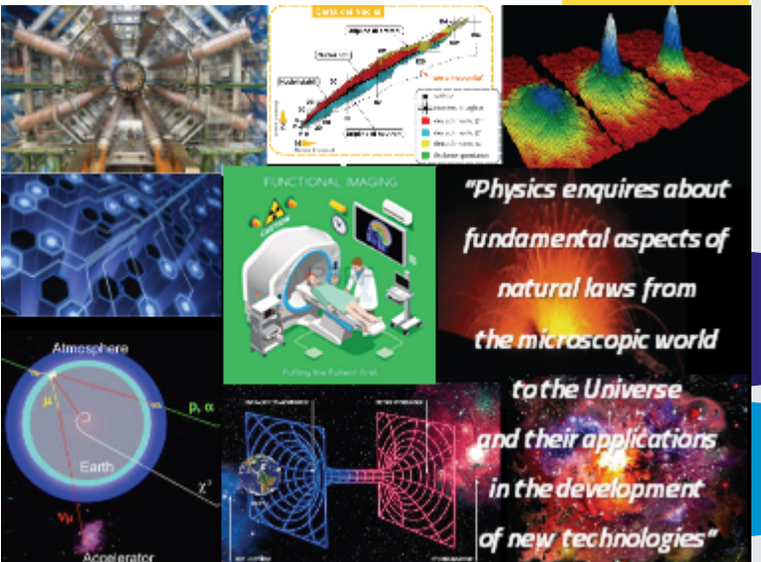
RESEARCH – Learning experience in an environment devoted to advanced research activities in collaboration with national and international research centers.

QUALIFICATION – Acquisition of a wide range of advanced and subject-specific professional skills and possibility of stages at public research centers and companies.

Scientific collaborations and exchange programs with public research entities (CNR, INAF, INFN, INGV, etc.) and other universities allow studying in a pleasant and stimulating environment with a strong international focus.

"It is no good to try to stop knowledge from going forward. Ignorance is never better than knowledge." (Enrico Fermi)

MSc Course Coordinator
Prof. Salvatore Amoruso
salvatore.amoruso@unina.it



Links

Polytechnic and Basic Sciences School
www.scuolapsb.unina.it

Department of Physics "Ettore Pancini"
www.fisica.unina.it

MSc in Physics
www.fisica.unina.it/en_GB/corso-di-laurea-magistrale-in-fisica

Student Administration Office
Department of Physics "Ettore Pancini"
Complesso universitario di Monte S. Angelo,
Via Cintia - Tel. 081676874
segrdid.fisica@unina.it

School Student Administration Office
College of Sciences
Complesso Universitario di Monte S. Angelo
Tel. 081-676550 – 081-676544
segrmmff@unina.it

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May 2020

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UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II
SCUOLA POLITECNICA E DELLE SCIENZE DI BASE

COLLEGIO DEGLI STUDI DI **SCIENZE**

MSc in PHYSICS

(LAUREA MAGISTRALE IN FISICA - LMF)

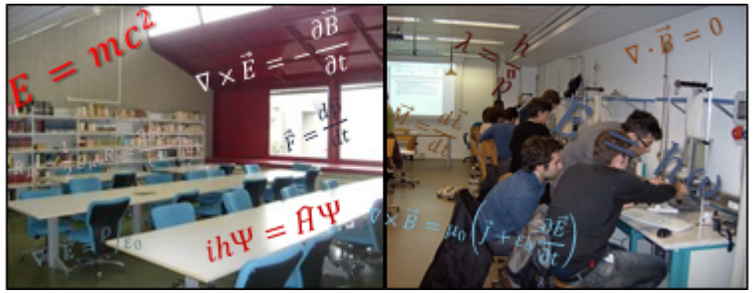
UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II - DIPARTIMENTO DI
FISICA "ETTORE PANCINI"

LEARNING OBJECTIVES

The learning objectives of the MSc course are:

- acquisition of a thorough cultural training in the fields of physics, from macro to micro;
- deep knowledge on modern physical measurement methods and data analysis;
- full understanding of the physics-related mathematical and information technology methods;
- good mastery of the Scientific Method;
- high scientific skills in one of the following Physics branches: Astrophysics, Biophysics, Didactics and History of Physics, Electronics, Applied Physics, Biomedical Physics, Physics of Matter, Space Physics, Nuclear Physics, Subnuclear and Astroparticles Physics, Theoretical Physics and Geophysics.

The MSc in Physics offers a number of curricula aimed at providing skills in the widespread Research Programmes in Physics active at our University



ENTRY REQUIREMENTS

The minimum entrance criteria for the MSc program require advanced understanding of Physics, Mathematics, and Chemistry as well as good proficiency in technical English.
The enrolment is subject to a preliminary evaluation of the applicant's *curriculum studiorum*. Relevant entry prerequisites are the previous achievement of at least 20 ECTS credits in Mathematics, Chemistry, Information Technology and of at least 40 ECTS in Physics area with knowledge of Classical Physics, Quantum Mechanics and Microphysics, Physics laboratory and data analysis.
These prerequisites are automatically acknowledged to students holding a BSc in Physics graduated in an Italian University (ex D.M. 270: Classe L-30 "Scienze e Tecnologie Fisiche"; ex. D.M. 509/99: Laurea Triennale della classe XXV "Scienze e Tecnologie Fisiche").

TRAINING PROGRAM

The MSc in Physics offers the following 9 curricula:

- **Astrophysics**
- **Elettronics**
- **Physics of Matter**
- **Subnuclear Physics and Astroparticles**
- **Theoretical Physics**
- **Physics Education**
- **Biomedical Physics**
- **Nuclear Physics**
- **Geophysics**

The MSc syllabus allows to reach profound knowledge and competences in:

- fundamental and applied research in public and private national and international centers and companies.
- R&D in advanced industrial fields (technology, materials, electronics, environment, economy, health, ICT, etc.).
- secondary school teaching, communication and public understanding of science.

SYLLABUS

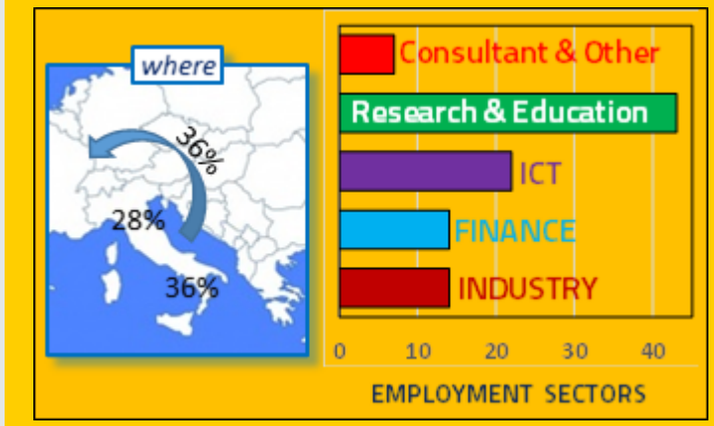
- 120 ECTS
- 28 mandatory ECTS in the following disciplines:
  - Classical Electrodynamics
  - Physics Laboratory
  - Quantum/Statistical Mechanics
- MSc Thesis: 41/42 ECTS

POSTGRADUATE OPPORTUNITIES

The acquired, high-level skills give access to PhD programs in Physics and in Quantum Technologies as well as to II-level masters (e.g. Medical Physics) and other science/engineering–based PhD programs of our University.

JOB AND CAREER OPPORTUNITIES

The MSc in Physics graduate can find profitable opportunities in career fields requiring good knowledge of the Scientific Method and high-level scientific and technical competences [e.g. scientific and technological innovation; public research entities and private companies characterized by high scientific, technical and cultural competences related to the sectors of industry, environment, healthcare, cultural heritage, public law enforcement bodies and administrations, etc.; education and public understanding of science; admission to the exam for a national qualification in Physicist Profession (Public Register of Chemists and Physicists) and consultant activities for unregulated professions under the Italian Law 4/2013].



THE PLACE

Lessons, including lectures and practical activities, are all held at the University Campus of Monte S. Angelo (200 m from exit Fuorigrotta of the A56 motorway "Tangenziale") reachable by bus from Piazzale Tecchio (R6, 180, 615) close to the train stations of Cumana (MOSTRA) and Metro (CAMPI FLEGREI).
The Campus is provided with various public utilities (e.g. canteen, bar, cash dispenser, photocopy shops).