

Second Cycle Degrees/Two-year Master Courses

<p>48 Degree Course BIOLOGY (LM-6)</p> <p>Department of Chemical, Biological, Pharmaceutical and Environmental Sciences</p> <p>Coordinator Prof. Dr. Maria Teresa Sciortino</p>
<p>At the end of the course, students will gain a deep scientific and professional knowledge in the field of Biology applied to health, food and nutrition. They will know topics related to the technological management available in the field of biology applied to the study of cellular systems. They could play a key role in the basic and applied research activities in the public health biology, microbiology and biotechnology and will be able to apply their knowledge as independent professional in the field of biosafety, environmental and microbiological biomonitoring and nutrition.</p>

<p>49 Degree Course BIOLOGY AND ECOLOGY OF MARINE COSTAL ENVIRONMENT (LM-6)</p> <p>Department of Chemical, Biological, Pharmaceutical and Environmental Sciences</p> <p>Coordinator PROF. FABIO MARINO</p>
<p>Students will obtain operative, applicative and management skills in biology and ecology of costal marine environment, in general, and in the Mediterranean eco-system, in particular. Students will study subjects including marine botany, marine biochemistry, marine biotechnology, aquaculture. Students will acquire skills to manage marine parks and marine reserves, as well as aquaculture facilities, and to work in public and/or private research centers.</p>

<p>50 Degree Course BIOTECHNOLOGY FOR HEALTH (LM-9)</p> <p>Department of Biomedical and Dental Sciences and Morphofunctional Imaging</p> <p>Coordinator GIUSEPPE GIUFFRÈ</p>
<p>You will reach high level of proficiency in research, in developing and applying diagnostic strategies on biotechnological bases in those fields correlated to health care. You will also have a chance to improve your competences in biochemistry, biology, genetics, microbiology and molecular diagnostics and target therapy. You could be given roles of high responsibility in health care institutes, pharmaceutical companies and counseling tasks in organizations and institutes interested in biotechnological research.</p>

<p>51 Degree Course Chemistry (LM-54)</p> <p>Department of Chemical, Biological, Pharmaceutical and Environmental Sciences</p> <p>Coordinator CLAUDIA FOTI</p>
<p>Learn more about the knowledge gained during the first level degree program, enabling you to work in areas that require design and applicative skills for innovative methods, techniques and equipments, as well as critical interpretation of experimental results.</p> <p>Your acquired skills will also allow you to adapt to the evolution of the discipline, interact with culturally contiguous professionalisms, and continue your studies at the highest cultural level.</p> <p>The course is organized in three curricula: analytical-biological; supramolecular- nanotechnological; industrial-environmental.</p>

<p>52 Degree Course Literary History from the Middle Ages to the contemporary era in Italy (LM-14)</p> <p>Department of Ancient and Modern Civilizations</p> <p>Coordinator CATERINA MALTA</p>
<p>Students will acquire methodological and scientific skills in Italian linguistics and literary history from the Middle Ages to the contemporary era. Amongst other subjects you'll study, are philological-literary, linguistic, historical-artistic and geographical disciplines. Insightful candidates may compete for teaching posts, handle employment selections in public administration or gain access to PhDs. The aim is to be able to carry out duties in state archives, libraries, administrative offices in the field of art, publishing houses, cultural centres, foundations and Italian foreign public and private organizations and institutions. The course also provides basic preparation skills for those pursuing a career in journalism.</p>

<p>53 Degree Course CONSULTING AND BUSINESS ADMINISTRATION (LM 77) – Language: English</p> <p>Department of Economics</p> <p>Coordinator FRANCESCO CIRAULO</p>
<p>You will acquire highly specialised skills in the field of accounting and business consulting, as well as in business administration. You will be able to work in the field of auditing and accounting, in both public and private enterprises, holding management positions.</p> <p>You will attend a qualifying course for the purpose of practising as a “Dottore Commercialista” (accountant), after completing the internship and passing the State exam.</p> <p>Attending the curriculum in International Management (wholly held in English), you will acquire the ability to understand and govern the policies and strategies that a company faces in an international environment and you will understand the main management-related problems of business organisations acting on a global scale.</p>

54

Degree Course

ENGINEERING AND COMPUTER SCIENCE (LM-18 & LM-32). Language: English

Department of Engineering

Coordinator

MARCO LUCIO SCARPA

The Master Degree Program in Engineering and Computer Science (ECS) has been planned with the purpose of providing a venue to complete educational and learning paths embarked on during bachelor degree programs belonging to the L-8 and L-31 categories, and training IT professionals with specific skills and design abilities. A partial list of activities that master graduates would tackle is: analysis and formalization of complex problems in several application contexts, design and development of algorithms and computer systems of outstanding quality, possibly also innovative in terms of adopted techniques and methodologies; design of industrial applications different applicative domain like tertiary services, environment, healthcare, cultural heritage or public administration.

A wide range of choices among the subjects to be included in the curriculum, belonging to various sub-fields, enables students attending the Master Degree Program to tailor well defined training programs, within which to nurture computer engineering as well as computer science skills. In particular specialized courses will be delivered about:

- computer and communication networks; in this context, students get trained in designing networks, in particular furthering topics related to security;
- distributed systems, with special emphasis on Cloud computing and resource sharing, learning how to set up and manage computational systems tunable to the needs of users;
- wireless systems and Internet of Things, acquiring skills for the management and analysis of Big Data as produced by Internet-connected objects;
- multimedia systems, with specific attention to topics related to the Web.

Knowledge and skills, educational goals

The Master Degree Program in Engineering and Computer Science (ECS) has been planned with the purpose of enabling a full accomplishment of educational and learning paths embarked on during bachelor degree programs belonging to both Computer Engineering and Computer Science tracks, and training IT professionals with specific skills and design abilities.

With respect to the educational goals the two categories manifest remarkable analogies, highlighted by the overlap, in the respective charters, of several requirements marked as typical for graduates of Master Programs belonging to either of the two categories. Moreover the two master degrees both entitle graduates for admission to tests for obtaining the license to practice as Engineers; still further evidence that in the end educational goals of the two categories have at least some common ground and share a reference employment profile.

A graduate in the Master Degree Program in Engineering and Computer Science (ECS) is bound for being:

- able to devise, plan, design and manage complex and/or innovative systems, processes and services, with special emphasis on distributed information systems, computer networks, multimedia production and management;
- able to design and manage highly complex experiments;
- equipped with contextual knowledge and cross-domain skills, suitably improved in comparison to those earned in lower level degree programs.

All the courses are delivered in English, characterizing the ECS as an international MSc course where non Italian students can easily apply for enrollment and attend classes without further problems in understanding lessons.

Vocation to internationalization will grow in the next year with a third track whose final goal is to deliver a double degree in cooperation with the Polytechnic University of Hong Kong (PolyU). Double degree track is organized in such a way students spend their first year course in Messina and eight months, during the second year, in Hong Kong where they attend some classes and make exams. The last period, devoted to the master thesis can be chosen to be spent either at the Polytechnic University of Hong Kong or at the University of Messina. At the end of the study period the students enrolled in the double degree track obtain both Italian and Chinese degrees.

Employment opportunities

The Master Degree Program in Engineering and Computer Science (ECS) enables graduates in designing and implementing information systems, especially with regards to software design aspects or through software in information processing systems. The typical professional areas for master degree graduates include innovation and development of production, advanced design, planning and scheduling, management of complex hardware and software systems, whether in manufacturing or service industries, in public administrations or as freelancers. Master degree graduates are therefore well positioned to be employed at IT businesses active in the areas of hardware and software production; industries for automation and robotics; enterprises active in the area of informative systems and computer networks; service providers; IT services for public administrations; freelance workforce. The delivery of lectures and supporting activities in English will ease entry of graduates in the global job market, thus making professional profiles of graduates even more attractive for businesses. A sample of professional profiles are listed in the following, categorized according to domains of expertise:

- Software design: analyst for enterprise-level applications/developer for advanced platforms/project manager;
- expert in computer security;
- Web-based systems: designer/developer of Web sites;
- Information systems: analyst/designer/security officer/system project manager;
- Embedded systems design: analyst/designer/system project manager;
- Computer systems management: manager for quality of service assurance and expert in computer security.

55

Degree Course

CONTEMPORARY PHILOSOPHY (LM-78)

Department of Ancient and Modern Civilizations

Coordinator

PIERANDREA AMATO

56

Degree Course

Physics (LM-17)

Department of Mathematics, Computer Sciences, Physics and Earth Sciences

Coordinator

ULDERICO WANDERLINGH

The Master's Degree in Physics has the aim of ensuring the graduate has a high degree of scientific and operational training in the various fields of physics, in accordance with the qualifying training objectives that comprise the LM-17 class of the Master's degree in Physics.

The didactic organization of the CLM in Physics provides three different curricula:

Physics of Matter;

Applied Physics;

Nuclear physics

In each address you can choose between optional courses to better characterize the training path.

In particular, the master degree in Physics will have acquired:

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

An in-depth knowledge of modern measuring instruments and data analysis techniques;

An in-depth knowledge of mathematical and computer support tools;

A high degree of ability to work with broad autonomy also by taking responsibility for projects and structures.

Physicists conducts research, consulting, training and updating in the various physical disciplines and their application in the industrial, environmental, health, cultural and public sectors, developing theories, methods of calculation, instrumentation and measurement methodologies.

In particular, at Messina you can specialized in various fields such as the theoretical and experimental study of the properties of matter and materials, nuclear and subnuclear physics, physics / health physics and the application of this knowledge for the solution of various scientific and technological problems.

In the field of applied research, physicists work to solve specific practical problems and propose new technical solutions, also in collaboration with other professional technical-scientific examiners (chemists, biologists, engineers, computer scientists, doctors, etc.). The results of its activity are used in the most diverse sectors: energy, IT, transport, telecommunications, construction, healthcare, etc.

57

Degree Course
CIVIL ENGINEERING (LM-23)

Department of Engineering
Coordinator
GIUSEPPE TITO ARONICA

58

Degree Course
ENGINEERING FOR BUILDING RESTORATION (LM-24)

Department of Engineering
Coordinator
MASSIMO DI GANGI

The course is aimed at the acquisition of in-depth methodological skills to be applied to the various stages of the building process. Design and management of building renovation work, creation of new architectural organizations, coordination of specialists and operators in several fields such as urban and architectural, represent some of the activities that you can undertake. You will have to deal with technical drawings, regulations, drafts of urban design, construction, etc. As well as being a freelancer, you might play a high responsibility role in public and private organizations, operating in the fields of construction and of the processes of urban and territorial transformation.

59

Degree Course
MECHANICAL ENGINEERING (LM-33)

Department of Engineering
Coordinator
EUGENIO GUGLIEMINO

The student will learn methods and scientific content in the field of classical mechanics. In addition, he will have the skills to design and manage processes in various applications such as research and development, production, advanced design and complex system management.

The acquired skills are applied in companies in the following sectors: mechanical and electromechanical industries, manufacturing companies, transformation, energy production and conversion companies as well as design offices and professional activities.

60
Degree Course MODERN LANGUAGES: LITERATURE AND TRANSLATION (LM 37)
Department of Ancient and Modern Civilizations Coordinator STELLA MANGIAPANE
You will acquire solid and in-depth scientific and methodological skills for the study of modern European and American languages from both a historical and philological perspective as languages in use, as well as within a cultural and literary context. You will have the opportunity to expand your use and knowledge of the critical tools necessary for a scientific approach to linguistic, literary and social, as well as cultural, phenomena regarding the various areas pertinent to your course. At the end of your studies you will be able to find work in teaching or for Italian cultural associations abroad, in the diplomatic sector, in publishing, journalism and entertainment.

61
Degree Course MANAGEMENT OF TOURISM AND ENVIRONMENT (LM-77)
Department of Economics Coordinator FRANCESCO LANUZZA

62
Degree Course MATEMATICS (LM-40)
Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences Coordinator MADDALENA BONANZINGA
You will have the opportunity to complete your math training and start pure and applied research in various fields, both academic and industrial. The mathematicians find work in teaching and as experts in several sectors (technological, economic-financial, biomedical, etc.) in which math training is fundamental to research and development. You will study subjects that will give you the ability to develop useful skills to generate math model for real situations and phenomena.

63
Degree Course JOURNALISM METHODS AND LANGUAGES (LM-19)
Department of Ancient and Modern Civilizations Coordinator PASQUALE DE MEO
The MSc Degree entitled “Metodi e Linguaggi del Giornalismo” will equip the students with the theoretical skills and practical training to build a career in the fields of communication and journalism.

The course will focus on the analysis and interpretation of social, economical and political factors affecting our society through the lens of contemporary media. Students will gain an in-depth knowledge about modern communication technologies, with a special emphasis on the Web and social media. Main job opportunities will be in the sectors of radio, television, print and online communication platforms as well as in human resource management.

64

Degree Course
Clinical and Health Psychology in the life cycle (LM-51)

Department of Clinical and Experimental Medicine
Coordinator
GIUSEPPA FILIPPELLO

The Master Degree in "Clinical and Health Psychology in the Lifecycle" aims to provide advanced training in different theoretical, design and operational areas of Psychology with particular attention to clinical aspects and the promotion and maintenance of Health, throughout the life cycle, according to a bio-psychosocial perspective. The Degree Course aims to train professionals who can take responsibility for interventions designed to identify the behaviours relevant to health and psychological well-being; The promotion of health and appropriate lifestyles; The prevention of disorders, clinical psychodiagnosis, counseling and rehabilitation. Graduates acquire skills that enable them to formulate diagnosis and implement psychological interventions on the field in full autonomy. For A.A. 2017/18, 150 students can be enrolled. A call will be published with all the necessary information (admission, criteria, timing).

65

Degree Course
INTERNATIONAL RELATIONS AND DEVELOPMENT COOPERATION (LM-52 & LM-81)

Department of Political and Juridical Sciences
Coordinator
DANIELE POMPEJANO

You will have the opportunity to study in depth historical, political, as well economic and law disciplines. At the end of your studies, you will be able to analyse international as well European trends which affect political bodies, research institutes, government and non-governmental organizations too. Your degree allows you to undertake diplomatics and other careers at European and international institutions. You can also get a job in international, civil and non-governmental organizations working in international cooperation.

66

Degree Course
Theory and Methods of Preventive and Adapted Physical Activities (LM-67)

Department of Biomedical and Dental Sciences and Morphofunctional Imaging
Coordinator
LUDOVICO MAGAUDDA

Theory and Methods of Preventive and Adapted Physical Activities
Department of Biomedical and Dental Sciences and Morphofunctional Imaging
The student will be able to design and conduct motor and sport related programs for educational,

rehabilitative and recreational purposes. The student will examine in depth issues related to preventive and adaptive motor activities with the aim, at the end of the of the courses, to realize specific task for pediatric and elderly subjects even affected by either chronic diseases or disability. The student can practice and be employed in schools, public and private institutions.

67

Degree Course

COGNITIVE SCIENCE AND COMMUNICATION THEORIES (LM-55 & LM92)

Department of Cognitive Sciences, Education and Cultural Studies

Coordinator

ALESSIO PLEBE

The objective of the Degree is to prepare students for career paths where cognitive science and/or communication theories play an important role. The degree in cognitive science can prepare for for careers in artificial intelligence, business, data analysis, education, government intelligence, health care, cognitive rehabilitation and enhancement, product design and software design. Cognitive science focuses on the understanding of intelligent systems, both biological and artificial. This field requires diverse approaches to understanding these systems, including domains from general and experimental psychology, neuroscience, linguistics, computer science, and engineering. The degree in communication theories can prepare for careers in market research, education, advertising, journalism, media editors, and many other professions where deep knowledge of human communication mechanisms is crucial. Communication theories integrates aspects of both social sciences and language sciences, concentrating on the nature of communication in society, and extended with theories of computer-mediated communication and the implications of new media for communication. Graduates of both cognitive science and communication theories may take different career paths, in the government and public sector, or in the private and corporate sector, or as professional consultant.

68

Degree Course

HEALTH PROFESSIONS OF TECHNICAL SCIENCES (DIAGNOSTICS) (LM/SNT/3A)
(Programmed Number)

Department of Biomedical and Dental Sciences and Morphofunctional Imaging

Coordinator

ANTONIO GIROLAMO MICALI

In the course of studies, you will learn how to manage and organize health services. It will master disciplines in the economic, managerial and communicative field. At the end of studies you will be able to implement preventive, diagnostic interventions and educational in response to health problems of the pediatric population, adult and geriatric, as well as the quality, organizational and managerial problems of the health services. You will be able to carry out your work within healthcare facilities public and/or private domains of varying complexities.

69

Degree Course

Political and Juridical Sciences

Department of Political and Juridical Sciences (LM 63)

Prof.ssa Daniela Novarese

You will acquire an high education in juridical, historic-institutional, political and economic-statistical

circles. Thanks to the acquired abilities, you will be able to work in the highest staff of the public and private administration.

70

Degree Course
ECONOMICS AND FINANCE (LM-56)
Department of Economics
Coordinator
ANTONINO DI PINO INCOGNITO

If you attend the Degree in Economics and Finance you will have the opportunity to acquire the skills needed to operate in the economic and financial sector. You will be able to improve your knowledge in the advanced studies of Economics, Finance and Statistics. At the end of the courses you will be able to carry out directing functions in various working fields, both public and private, also in an international context, and above all in the banking, insurance and business sectors.

71

Degree Course
NURSING AND OBSTETRICS (LM / SNT1)

Department of Human and Pediatric Pathology "Gaetano Barresi(programmed number)
Coordinator
Cesare Lorenzini

Scientific knowledge, ethical values and professional skills useful in a research and clinical context: these are the main elements offered by the course.
Students can consolidate advanced educational, preventive, assistance, rehabilitative and palliative skills through the study of different disciplines and the methodology of scientific research, acquiring the ability to respond to priority population health problems and to contribute in improvement of service quality. Students will be able to acquire those skills that are useful to design, to develop and to evaluate organizational models in assistance, formative and managerial fields of nursing and midwifery professions.

72

Degree Course
Pedagogical Sciences – LM85

Department of Cognitive Sciences, Education and Cultural Studies
Coordinator
LEONARDA VAIANA

The student in Pedagogical Sciences:
acquires a common core of knowledge in the fields of pedagogical, historical, philosophical, psychological and sociological sciences
develops specific competences that will aid in carrying out his/ her various roles as counselor, coordinator, and consultant in private and public settings, and in institutional and professional settings.
graduates will possess knowledge of theory and research, skills in appraisal, expertise in intervention techniques, and will be able to design learning environments with emphasis in applications to educational services. graduates will be equipped with the knowledge, understanding, critical thinking and practical skills they will need to pursue a successful teaching career in high schools

73
Degree Course REHABILITATION SCIENCES OF HEALTHCARE PROFESSIONALS (CLASS LM / SNT2)
Department of Human and Pediatric Pathology "Gaetano Barresi (programmed number) Coordinator FRANCESCO GALLETTI

74
Degree Course HISTORICAL SCIENCES: SOCIETY, CULTURE AND EUROPEAN INSTITUTIONS (LM-84)
Department of Ancient and Modern Civilizations Coordinator CESARE MAGAZZU'
If you're fond of investigating, rebuilding and analyzing the facts, learning techniques to find and use archival sources and bibliography, as well as methodologies of social sciences and economics and political institutions, at the end of the Degree Course you will be able to apply what you will have learned by exercising high-level responsibilities in the field of teaching (according to the path provided by law), publishing, information, culture, management and the recovery of local traditions.

75
Degree Course SOCIAL WORKS, POLICIES AND STUDIES AND RESEARCH (CLASS LM-87 & LM-88)
Department of Cognitive Sciences, Education and Cultural Studies Coordinator ALESSANDRA MARIA FALZONE

76
Degree Course Classical Tradition and Mediterranean Archaeology (LM-2 & LM-15)
Department of Ancient and Modern Civilizations Coordinator GIOACCHINO LA TORRE
The traditional approach to literary, historical and archaeological phenomena related to ancient cultures relies onto new technologies. Students mostly interested in Classical Tradition will have the opportunity of choosing solid philological and literary skills, that implies both the knowledge of classical Greek and Latin texts and their fortune in Western civilization. On the other hand, students mostly interested in Archaeology will have the opportunity of deeping the knowledge of the Greek and Roman archaeology and history of art, with particular regard to Sicily and Southern Italy. Employment opportunities are expected in the teaching in High Schools (following the rules in force) and in Public Institution such as Archives, Libraries, Superintendencies, Museums, Cultural Centers.

77

Degree Course
TOURISM AND ENTERTAINMENT (CLASS LM-49 & LM-65)

Department of Cognitive Sciences, Education and Cultural Studies
Coordinator
GIUSEPPE CARIDI

The Degree in Tourism and Entertainment allows you to design, organize and to valorize tourist and cultural resources of the territory. You will be able to communicate tourist concept through the acquisition of multiple abilities: creative ability, the secrets of territorial marketing, smart culture as innovative tool to enhance tourism territorial competitiveness. Those skills will be integrated with further typical skills of arts, music and arts show; you can design and make live works, events and performances (Performing arts) in his several aspects: musical, cinematic, theatrical and photographic.

78

Degree Course
PROTECTION AND MANAGEMENT OF LAND AND NATURAL ENVIRONMENT (LM-60)

Department of Mathematics, Informatics, Physics and Earth Sciences
Coordinator
GIANCARLO NERI

The defense and correct management of land and environment play basic roles in the life of people and communities, and this concept becomes even more relevant as society progresses socially and technologically.
The Course will allow the students to deepen the issues related to environmental and territorial risks, with the main purpose of preparing professional figures who can work in civil protection organizations, in public administrations and local authorities, but also in private subjects, on the themes of risk evaluation and mitigation.