



# CIVIS OPEN ONLINE COURSE CATALOGUE SAPIENZA UNIVERSITY OF ROME COURSES LIST

Academic Year 2022-2023









## TITLE: Laboratory of Product Representation

#### Faculty of Architecture

Internal code

10589029

| LANGUAGE(S)               | English                                | LEVEL OF STUDY     | Master                                |
|---------------------------|--|--------------------|---------------------------------------|
| CREDIT POINTS             | N/A                                    | LIMITED ATTENDANCE |                                       |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation |                    | 3D modeling  <br>Computational Design |
| PERIOD                    | First semester                         | DURATION           | 72h / total 14 weeks                  |

#### **DESCRIPTION:**

#### General goals:

This represents a basic course about Design Representation, 3D Modeling and Computational Design

#### Specific goals:

- Experiment some different aspects of the production process of product design;
- Acquiring the ability to understand 3D space:
- Control the dual path of design, from real to virtual and back
- Learning 2D/3D modelling approaches;
- Acquiring 3D Imaging skills;
- Managing technical drawing and rendering simulations;
- Preparing a presentation of design products

#### Knowledge and understanding:

The student will acquire:

- 1. The ability to observe and understand the relation between product and space.
- 2. The knowledge to manage different types of models, supporting all possible purposes in the path of knowledge and visualization of the product;
- 3. The capabilities for using correct pictures both as data source for analysis and final purpose of communicating 3D models.

#### Applying knowledge and understanding:

The knowledge acquired is basic in Product ande Service Design field, but it can be expanded to Architecture and Communication domain

#### Communication skills:

Developing students' ability to communicate advanced results in the field of Product Design

#### Ability of learning:

Knowledge about Design Representation is necessary to understand the relation between products and environment, evaluating their capacities and defining a geometrical schema to simulate reality, supporting both project and analysis path."









| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | m.russo@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Advanced Design Studio

## Faculty of Architecture

Internal code

N/A

| LANGUAGE(S)               | English                         |                          | Master Design for sustainable consumption and production   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | N/A                             | LIMITED ATTENDANCE       |  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Society, Culture,<br>HeritageSociety,<br>Culture, Heritage |
| PERIOD                    | Second semester                 | DURATION                 | 120h / total 14 weeks                                      |

#### **DESCRIPTION:**

This is a team-based studio focused on the exploration of the contemporary changes in the structure of markets, as well as, of the emerging forms of production-distribution, which require also changes in the design approaches and in the design activities results.

The packaging industry is the Design topic. The design purpose is to investigate the future of the packaging starting from its historical evolution, replying to the more urgent needs and applying a systemic approach to innovation.

At the same time, in order to involve the students in an advanced design process, the follow aspects will be taken in account:

from social point of view, the phenomenon of self-production and consciousness consumption (DIY, makers, critical mass, fabing, ecc.);

from technological point of view, the improvement of new manufacturing (digital fabrication, advanced manufacturing, crowd-sourcing);

from economic point of view, the phenomenon of open-sourcing and the sharing-economy (crowd-sourcing, social networking, botton-up economy); from environmental point of view, the phenomenon of the zero-impact, zero-waste and zero-resources.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.architettura.uniroma1.it/  |
| CONTACT<br>INFORMATION | loredana.dilucchio@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: URBAN DESIGN STUDIO FOR REGENERATION

## Faculty of Architecture

*Internal code* 10588655

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                |
|---------------------------|----------------------------------|--------------------------|-----------------------|
| CREDIT POINTS             | N/A                              | LIMITED ATTENDANCE       |                       |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Urban Planning        |
| PERIOD                    | First semester                   | DURATION                 | 125h / total 14 weeks |

#### **DESCRIPTION:**

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://www.architettura.uniroma1.it/   |
| CONTACT<br>INFORMATION | marika.fior@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: DESIGN STUDIO - ARCHITECTURE AND URBAN DESIGN

## Faculty of Architecture

Internal code 1056423

| LANGUAGE(S)               | English                          | LEVEL OF STUDY        | Master                |
|---------------------------|----------------------------------|-----------------------|-----------------------|
| CREDIT POINTS             | N/A                              | LIMITED ATTENDANCE    | 10                    |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF STUDY | Architecture          |
| PERIOD                    | First semester                   | DURATION              | 100h / total 14 weeks |

#### **DESCRIPTION:**

DESIGN STUDIO - ARCHITECTURE AND URBAN DESIGN proposes the design of a new residential building where the students must first define the overall design and then architecturally develop an intervention unit (design and construction unit). Consequently, the laboratory is divided into two distinct phases, but strictly and logically connected.

| PREREQUISITES       | yes, sending an email to the professor   |
|---------------------|--|
| WEBSITE             | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/29390/20210916103754/defa1bf9-b2f8-4478-83ac-<br>bff72668ffeb/d1dc2483-7522-4739-b7c4-0c183d865dbf/fab39f08-<br>0868-4fdd-aa04-713a15702d25/a71a322f-ec1f-44fa-8202-<br>c4e221264c81?guid_cv=d1dc2483-7522-4739-b7c4-<br>0c183d865dbf&current_erogata=defa1bf9-b2f8-4478-83ac-<br>bff72668ffeb |
| CONTACT INFORMATION | anna.delmonaco@uniroma1.it   |
| REGISTRATION        | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.   |









# TITLE: HOUSING POLICIES, STRATEGIES AND TOOLS FOR URBAN REGENERATION

#### Faculty of Architecture

Internal code

10588649

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                |
|---------------------------|----------------------------------|--------------------------|-----------------------|
| CREDIT POINTS             | 8                                | LIMITED ATTENDANCE       | No                    |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Urban Planning        |
| PERIOD                    | Second semester                  | DURATION                 | 100h / total 14 weeks |

#### **DESCRIPTION:**

The course aims to provide an adequate knowledge of the policies, strategies and tools for housing, within the national and international regulatory framework, with particular reference to urban regeneration strategies.

Regeneration strategies concern not only physical-morphological redevelopment interventions, but also projects aimed at providing an integrated response to the demands of environmental regeneration, socio-economic revitalization and cultural enhancement, according to principles of sustainability and resilience to environmental and socio-economic changes. Those strategies constitute the main point of reference for intervention in the contemporary city and, in particular, in the public housing settlements, pursuing the enhancement of the common goods, on which the structure and image of the city will be re-founded, the quality of the urban environment and the collective use of spaces.

In this framework, the course will refer to best practices characterized by disciplinary innovation, contextualised in the specific geographical contexts and time, emblematic in terms of ecological-environmental sustainability, economic-financial feasibility and social inclusion. This best practice pursuit high levels of urban quality, through the construction of the public city and the enhancement of the common goods.

Furthermore, through a sperimentation activity, the course aims to verify the theoretical, methodological and operational references acquired.

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | https://www.architettura.uniroma1.it/   |
| CONTACT<br>INFORMATION | francesca.rossi@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









#### TITLE: SUSTAINABLE DESIGN FOR GREENER CITIES

#### Faculty of Architecture

*Internal code* 10588646

| LANGUAGE(S)               | English  |                          | Architectural<br>Technologies   |
|---------------------------|--|--------------------------|---------------------------------|
| CREDIT POINTS             | 8  | LIMITED ATTENDANCE       | No                              |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility,Climate,<br>Environment, Energy | OTHER DOMAIN OF<br>STUDY | Climate, Environment,<br>Energy |
| PERIOD                    | Second semester  | DURATION                 | 100h / total 14 weeks           |

#### **DESCRIPTION:**

The course deals with the theme of sustainable design, with particular attention to the redevelopment of existing buildings as a fundamental strategy for the regeneration of current urban contexts, deepening the themes and knowledge on technologies, materials and technical solutions for the reconversion of building structures. characterized by poor ecological compatibility and poor energy-environmental efficiency in eco-compatible and eco-efficient buildings, able to respond adequately to the current environmental demands for controlling the impacts in the atmosphere, limiting climate-altering emissions, microclimatic quality of urban environments and saving of energy resources.

Within this general framework, specific methodological approaches will be defined which, starting from appropriate analyzes of the urban and environmental context of reference (analyzes relating to the microclimatic, biophysical and anthropic environmental system), object of specific lessons, define substantial and fundamental inputs. of the technical-design processes, in particular through the identification of environmental criticalities to be solved and potentialities to be used for the purpose of a bio-ecological and energetic improvement of the built context. The technical and technological aspects related to energy and bioclimatic retrofitting strategies, central strategies for effective regeneration and redevelopment of urban contexts and buildings in terms of eco-efficiency and low environmental impact will therefore be studied in depth.

The lessons will be divided into the following themes:

Sustainable Building for Greener Cities

General characters and principles, examples of best practice

• The knowledge and understanding of the specific characteristics of the context as a fundamental input for urban regeneration and building redevelopment operations.









Analysis of the reference environmental context:

- Analysis of the microclimatic system (climatic-environmental components; analysis tools and methodologies)
- Analysis of the physical layout of the places (biophysical system, anthropic system, criteria and methods of analysis)
- Analysis of the reference building context (analysis of the energy-environmental behavior of buildings; analysis of the performance and requirements expressed by the different classes of demand; analysis of the technological characteristics)
- Technologies for bio-ecological requalification and energy and environmental rebalancing of the built context: technical solutions, materials, technological innovation.
- Technologies, materials and technical solutions for the bio-ecological and energy efficiency of the built structures (with particular reference to the conditions of healthiness and environmental compatibility of urban spaces and confined spaces)
- Technologies, materials and technical solutions for solving and mitigating the critical environmental conditions of the built structures (e.g. inadequate sunshine and ventilation conditions in both summer and winter, such as to determine situations of discomfort and high energy demands for indoor microclimatic rebalancing, etc.)
- Technologies, materials and technical solutions for the use and optimization of the environmental potential of the built structures (e.g. environmental conditions favorable to the use of natural environmental flows and natural operating principles for the air conditioning of buildings, etc.)

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | https://www.architettura.uniroma1.it/   |
| CONTACT<br>INFORMATION | mariabeatrice.andreucci@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: ARTIST ON THE MOVE

## Faculty of Arts and Humanities

Internal code 10595494

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                                   |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO                                       |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | GLOBAL<br>HUMANITIESGLOBAL<br>HUMANITIES |
| PERIOD                    | I SEMESTER                    | DURATION                 | SEMESTER                                 |

#### **DESCRIPTION:**

The module focuses on Tibetan contemporary artists who, whether at home or abroad, explore their multicultural influences, examining the tensions between traditional Tibetan and contemporary global culture. Some of the artists that will be introduced in the module include Gade (b. 1971, Lhasa), Gonkar Gyatso (b. 1961, Lhasa), Tenzing Rigdol (b. 1982, Kathmandu), Dedron (b. 1976, Lhasa).

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/filippo-salviati   |
| CONTACT<br>INFORMATION | prof.salviati@gmail.com  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









#### TITLE: Aesthetics III

#### Faculty of Arts and Humanities

Internal code 1052044

| LANGUAGE(S)               | English                       | LEVEL OF STUDY        | MASTER               |
|---------------------------|-------------------------------|-----------------------|----------------------|
| CREDIT POINTS             | 12                            | LIMITED ATTENDANCE    | NO                   |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF STUDY | AestheticsAesthetics |
| PERIOD                    | I SEMESTER                    | DURATION              | 64+ 12               |

#### **DESCRIPTION:**

The course (in English and in seminar form) intends to deal with the knot enchantment/disenchantment/re-enchantment that, for some years, and with increasing strength, has taken on a new prominence in the philosophical, anthropological and more specifically aesthetic debate, also directly involving artistic practices. It is a debate that occupies the humanities and social sciences at least since the theses developed by Max Weber in the first two decades of the twentieth century, but in recent years - especially in the face of a crisis in the forms of life of the richest societies and with the proposal of the category of Anthropocene and its derivatives - has taken on a new importance. On the one hand there are those who argue that the process of disenchantment of the world envisaged by Weber - as a premise of the great historical process of rationalization that tends to invest all spheres of life, stripping the world of any magical, animistic, anthropomorphic element, and making it dumb and deaf to any request for unitary sense - is the inescapable horizon of modernity. On the other hand, there are those who contest this picture, considering disenchantment as a partial phenomenon or as a prejudice, insisting either on the persistence of "non-disenchanted" pockets (magical, material and spiritual beliefs and practices, within our society and in other societies), or contesting the picture that modernity has made of itself ("we have never been modern", as Bruno Latour wrote). Still others seek modes and forms of life that are supposed to lead to a re-enchantment of the world. But what does this slogan imply? Aesthetic reflection and artistic practices are important elements in this debate that brings into play the most evident coordinates of modernity (critique and autonomy, the vision of nature and scientific research, the constitution of subjectivity and forms of social and political organization). We will analyze and discuss in class some texts and works that will allow to clarify the terms of this debate.

| WEBSITE                | https://www.lettere.uniroma1.it/users/stefano-velotti   |
|------------------------|---|
| CONTACT<br>INFORMATION | stefano.valotti@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: NARRATIVES OF MODERNITY IN COLONIAL AND POSTCOLONIAL INDIA B

## Faculty of Arts and Humanities

Internal code 1055465

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER   |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO   |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | Post Colonial<br>StudiesPost Colonial<br>Studies |
| PERIOD                    | I SEMESTER                    | DURATION                 | 30+12  |

#### **DESCRIPTION:**

Life stories are important historical documents providing insights into the social and cultural spirit of the times, without representing any objective historical 'truth'. As Arnold and Blackburn (2004) remind us, India provides a critical site for discussing life histories. The course draws attention to the diverse forms in which life narratives and expressions of selfhood were formulated in different historical periods in India, thus dismantling the long-held belief that the paradigm of collectivity had negated or marginalized the sense of individuality. Focusing on colonial and postcolonial narratives in India, this course analyses certain life stories in order to understand how these can be used for reconstructing history.

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://www.lettere.uniroma1.it/users/sanjukta-das-gupta  |
| CONTACT<br>INFORMATION | sanjukta.dasgupta@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: LATIN CULTURE AND LITERATURE**

## Faculty of Arts and Humanities

*Internal code* 10595085

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | BACHELOR                      |
|---------------------------|-------------------------------|--------------------------|-------------------------------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       |                               |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | Ancient LatinAncient<br>Latin |
| PERIOD                    | I SEMESTER                    | DURATION                 | 30+12                         |

#### **DESCRIPTION:**

The course shall survey key aspects and themes of Latin culture and literature

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/giorgio-piras  |
| CONTACT<br>INFORMATION | giorgio.piras@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: KOREAN LANGUAGE AND LITERATURE A

## Faculty of Arts and Humanities

Internal code 1055507

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                                 |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 12                            | LIMITED ATTENDANCE       | NO                                     |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | ORIENTAL<br>STUDIESORIENTAL<br>STUDIES |
| PERIOD                    | I+II SEMESTER                 | DURATION                 | ANNUAL                                 |

#### **DESCRIPTION:**

Language: the course is focused on teaching students with an intermediate level of Korean competence (independent user, reference level B2). Literature: reading, translation, textual analysis, and summary of the literary texts and essays. Tutorials on how to do research and write elaborations in Korean.

| PREREQUISITES          | KOREAN LANGUAGE B2-C1   |
|------------------------|---|
| WEBSITE                | https://www.lettere.uniroma1.it/users/antonetta-bruno   |
| CONTACT<br>INFORMATION | antonetta.bruno@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: WORLD LITERATURE

## Faculty of Arts and Humanities

*Internal code* 1055072

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER |
|---------------------------|-------------------------------|--------------------------|--------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | 20     |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY |        |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12  |

#### **DESCRIPTION:**

This course is focused on the basic topics of World Literature: international and transnational canon debate, translation of literatures and cultures, transnationalism and comparatism.

| PREREQUISITES          | having some knowledge of comparative literature   |
|------------------------|---|
| WEBSITE                | https://www.lettere.uniroma1.it/users/franca-sinopoli   |
| CONTACT<br>INFORMATION | FRANCA.SINOPOLI@UNIROMA1.IT   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: ROMAN ARCHAEOLOGY

#### Faculty of Arts and Humanities

Internal code 10592327

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                     |
|---------------------------|-------------------------------|--------------------------|----------------------------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO                         |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | ArchaeologyArchaeolo<br>gy |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12                      |

#### **DESCRIPTION:**

Ancient Rome. The Changing Landascapes of the Palatine Hill. Landscape and its content has been and still are very relevant and vital part of any cultural heritage. The course will introduce you to the way we have been reflecting on over the last twenty years and still are engaged with the study of cities of the Roman World, beginning from the most complex case in the ancient Mediterranean World: the core of Italy and of Roman Empire. Researches developed in the core of the ancient city (Palatine Hill and Forum Romanum) since the end of last century by teams of Sapienza Classical Archaeologists and other Italian and international equips opened a new phase in the urban archaeological investigation and in the scientific debate about the relation between archaeological features and literary tradition as well as the "correct use" of both kind of evidence, key issues of wide archaeological and historical significance. Students will also be introduced to methods and procedures applied in collection, analyses, integration and interpretation of complex and multi-stratificated contexts. After a brief introduction to methods (part 1) and to the ancient city of Rome as a whole (part 2), in this course students will be introduced to reconstructions of the topographical history of the ancient city from the earliest phases to the end of the Empire (parts 3-8).

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/paolo-carafa   |
| CONTACT<br>INFORMATION | paolo.carafa@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: History of ancient philosophy I

## Faculty of Arts and Humanities

Internal code 1056192

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                                     |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 12                            | LIMITED ATTENDANCE       | NO   |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | Ancient<br>PhylosophyAncient<br>Phylosophy |
| PERIOD                    | II SEMESTER                   | DURATION                 | 64+ 12                                     |

#### **DESCRIPTION:**

New Trends in Ancient Philosophy: The Hellenistic Turning Point. Against the background of the more general conviction according to which in ancient philosophy there is no decadence after Plato and Aristotle, but rather a radically new approach under many respects critically developed against the so-called 'classical philosophies', the course will analyze crucial aspects of the most important Hellenistic philosophies (Epicureanism, Stoicisms, and Scepticisms, both Academic and Neo-Pyrrhonian), in order to underline some very important, if not decisive theoretical features of those trends of thought, still valid and productive even for contemporary philosophical debates with regards to basic disciplines as logics, physics, ethics and politics.

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://www.lettere.uniroma1.it/users/emidio-spinelli   |
| CONTACT<br>INFORMATION | emidio.spinelli@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: COGNITIVE SEMANTICS**

## Faculty of Arts and Humanities

*Internal code* 10592791

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER             |
|---------------------------|-------------------------------|--------------------------|--------------------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO                 |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | SemioticsSemiotics |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12              |

#### **DESCRIPTION:**

The course aims at introducing the different conceptions of 'language' and consequently of 'meaning' developed in the complex paradigm of Cognitive Semantics.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/filomena-diodato   |
| CONTACT<br>INFORMATION | filomena.diodato@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: History of the english language

## Faculty of Arts and Humanities

Internal code 1051450

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                                 |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO                                     |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | English<br>LanguageEnglish<br>Language |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12                                  |

#### **DESCRIPTION:**

The study of the history of the English language can help students become aware of major issues in several academic fields, including history, literature, political science, anthropology, communication and, of course, languages and linguistics. The course will provide a general description of linguistic changes, and reasons for changes in the grammar, sounds, and vocabulary of English in XVI century. The module will focus on the Tudor period, and the cultural, religious, and economic changes that defined it: the effects of the development of printing, the ideological pressure of the Reformation, and the translation of classics and moderns are just some of the factors that would influence the English of this period. The linguistic variation in the diachronic perspective of the English vernacular will be explored through three text-types, translations, language manuals and dictionaries, all of which are dedicated to the reflection on language and communication between different languages. The figure and works of the Elizabethan linguist, lexicographer and translator John Florio will provide the privileged case study.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/donatella-montini  |
| CONTACT<br>INFORMATION | daniela.montini@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Anglo-american literatures - advanced course

## Faculty of Arts and Humanities

Internal code

10589164

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER                                     |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO   |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | English<br>LiteratureEnglish<br>Literature |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12                                      |

#### **DESCRIPTION:**

This 6 CFU course focuses on the traumatic memory and postmemory of World War II and the Holocaust as shaping forces in selected postmodernist and contemporary literary works by Kurt Vonnegut, Philip Roth, and Art Spiegelman. The syllabus will take into account different literary genres and forms, such as war novel, autofiction, uchronia, graphic novel memoir.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/paolo-simonetti  |
| CONTACT<br>INFORMATION | paolo.simonetti@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: SOCIAL HISTORY OF MODERN AND CONTEMPORARY INDIA B

## Faculty of Arts and Humanities

Internal code 10599604

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | MASTER   |
|---------------------------|-------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | NO   |
| THEMATIC CIVIS<br>AREA(S) | Society, culture,<br>heritage | OTHER DOMAIN OF<br>STUDY | Contemporary<br>HistoryContemporary<br>History |
| PERIOD                    | II SEMESTER                   | DURATION                 | 30+12  |

#### **DESCRIPTION:**

This course will examine some of the key themes in the social history of colonial India, with a focus on identity politics in the critical fields of caste, race and religion, and explore the linkages between them. Central to the course will be the socio-economic and political transitions experienced by Dalit and Adivasi communities in colonial and post-colonial India, highlighting the diverse representations of their histories and contemporary life experiences. Through an analysis of caste stratification, religious reforms, and the construction of 'tribe', the course will highlight their implications on constructions of nationalism, and on debates around 'tradition' and 'modernity'.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://www.lettere.uniroma1.it/users/sanjukta-das-gupta   |
| CONTACT<br>INFORMATION | sanjukta.dasgupta@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Economia Politica (canale A-D)

## Faculty of Economics

Internal code 1013712

| LANGUAGE(S)               | Italian               | LEVEL OF STUDY        | Bachelor |
|---------------------------|-----------------------|-----------------------|----------|
| CREDIT POINTS             | 9                     | LIMITED ATTENDANCE    | no       |
| THEMATIC CIVIS<br>AREA(S) | Other domain of study | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | I term                | DURATION              | 72       |

#### **DESCRIPTION:**

Il corso si propone di fornire agli studenti i concetti di base della moderna teoria economica. Nelle lezioni frontali, l'esposizione teorica è integrata dalla descrizione dei tratti più rilevanti dell'economia contemporanea in modo da pervenire a un'adeguata comprensione del funzionamento dei moderni sistemi economici.

Nella prima parte del corso, vengono esaminate le scelte dei consumatori e delle imprese con l'obiettivo di illustrare le forze che determinano l'allocazione delle risorse e la determinazione delle quantità e dei prezzi nei singoli mercati.

L'analisi si basa sullo studio dei comportamenti individuali di consumatori e imprese e dell'interazione tra agenti economici in diverse forme di mercato (concorrenza perfetta, monopolio).

La seconda parte concentra l'attenzione sul funzionamento dell'economia nel suo complesso. L'obiettivo è di fornire gli strumenti per l'analisi e la spiegazione dell'andamento delle principali variabili macroeconomiche (produzione, occupazione, consumi, investimenti, tassi d'interesse, bilancio pubblico).

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/users/luigiventurauniroma1it   |
| CONTACT<br>INFORMATION | Luigi Ventura   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: Business Plan**

## Faculty of Economics

*Internal code* 10600119

| LANGUAGE(S)               | Italian               | LEVEL OF STUDY        | Master |
|---------------------------|-----------------------|-----------------------|--------|
| CREDIT POINTS             | 9                     | LIMITED ATTENDANCE    | no     |
| THEMATIC CIVIS<br>AREA(S) | Other domain of study | OTHER DOMAIN OF STUDY |        |
| PERIOD                    | I term                | DURATION              | 72     |

#### **DESCRIPTION:**

Obiettivo del corso è fornire agli studenti gli strumenti manageriali necessari alla costruzione, analisi e valutazione del Business Plan. A tal fine saranno indagate le principali problematiche della gestione aziendale sia sul piano qualitativo che quantitativo.

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/deap/informazioni-su-rosa-lombardi  |
| CONTACT<br>INFORMATION | Rosa Lombardi   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: Digital Transformation and Data Management**

## Faculty of Economics

Internal code 10589487

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master |
|---------------------------|--|--------------------------|--------|
| CREDIT POINTS             | 9                                      | LIMITED ATTENDANCE       | no     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY |        |
| PERIOD                    | l term                                 | DURATION                 | 72     |

#### **DESCRIPTION:**

The aim of this course is twofold:

to provide students and practitioners with the basic knowledge for understanding the complexity of the challenges proposed by new digital technologies and introduce the tools for managing data coming from the business environment.

to introduce the students to the concepts of innovation and digital entrepreneurship. The module will benefit of the contributions coming from managers, researchers and innovators in order to raise the awareness regarding the disruptive nature of technological developments and develop the skills required to drive the transformation within enterprises.

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip_management/prof-francesco-bellini-0   |
| CONTACT<br>INFORMATION | Francesco Bellini   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Diritto Commerciale

## Faculty of Economics

Internal code 1017055

| LANGUAGE(S)               | Italian               | LEVEL OF STUDY        | Bachelor |
|---------------------------|-----------------------|-----------------------|----------|
| CREDIT POINTS             | 9                     | LIMITED ATTENDANCE    | no       |
| THEMATIC CIVIS<br>AREA(S) | Other domain of study | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | II term               | DURATION              | 72       |

#### **DESCRIPTION:**

Evoluzione storica e normativa del Diritto commerciale; Impresa e imprenditore; Categorie di imprenditori; acquisto qualità imprenditori; statuto dell'imprenditore commerciale; l'azienda; i segni distintivi; la proprietà intellettuale; concorrenza; contratti d'impresa; consorzi; gruppo europeo di interesse economico, associazioni temporanee d'imprese, reti d'impresa; titoli di credito; società e figure affini; società di persone: società semplice, società in nome collettivo, società in accomandita semplice; società di capitali: società per azioni, società in accomandita per azioni, società a responsabilità limitata; società con azioni quotate nei mercati regolamentati; società cooperative e mutue assicuratrici; trasformazione, fusione e scissione; società europee, gruppi.

| PREREQUISITES       | no  |
|---------------------|---|
| WEBSITE             | https://web.uniroma1.it/deap/informazioni-su-claudia-tedeschi   |
| CONTACT INFORMATION | Claudia Tedeschi  |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Business Information Systems

## Faculty of Economics

Internal code 1055962

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master |
|---------------------------|--|--------------------------|--------|
| CREDIT POINTS             | 9                                      | LIMITED ATTENDANCE       | no     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY |        |
| PERIOD                    | II term                                | DURATION                 | 72     |

#### **DESCRIPTION:**

The basic aim of the course is to provide students with the theoretical and technical knowledge in order to understand and use the tools and models that are based on the management of information systems. Students will be provided with the information concerning the current business models, the ways to increase competitive advantage with IT and MIS, how to manage and understand databases and data warehouses, which is the role and the advantage of the decision support systems, which may be the advantage of entering in the electronic commerce, how a system may be developed with information systems, which is the role played by a dynamic enterprise, how to protect data and which are the future trends. All elements cited above will be analyzed under an economic more than technical point of view aiming to understand which may be the effects on costs and on the efficiency of the organization.

| PREREQUISITES          | no   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_management/node/5598   |
| CONTACT<br>INFORMATION | Fabrizio D'Ascenzo   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Greenhouse gases: control and treatment

## Faculty of Civil and Industrial Engineering

*Internal code* 10599939

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria per<br>l'Ambiente e il<br>TerritorioIngegneria per<br>l'Ambiente e il Territorio |
| PERIOD                    | 22-23                           | DURATION                 | 60 hours  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/corso/2021/31286/programmazione

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/31286/programmazione   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/  |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Sustainable use of underground resources

## Faculty of Civil and Industrial Engineering

Internal code

N/A

| LANGUAGE(S)               | English                         | LEVEL OF STUDY        | Master  |
|---------------------------|---------------------------------|-----------------------|---|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE    | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF STUDY | Safety Engineering for territorial sustainability |
|                           |                                 |                       | Safety Engineering for territorial sustainability |
| PERIOD                    | 22-23                           | DURATION              | 60 hours  |

#### **DESCRIPTION:**

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingsicurezza/  |
| CONTACT<br>INFORMATION | claudio.alimonti@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Safety of solid processing plants

## Faculty of Civil and Industrial Engineering

Internal code

1051991

| LANGUAGE(S)               | English                         | LEVEL OF STUDY        | Master  |
|---------------------------|---------------------------------|-----------------------|---|
| CREDIT POINTS             | 6+3                             | LIMITED ATTENDANCE    | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF STUDY | Safety Engineering for territorial sustainability |
|                           |                                 |                       | Safety Engineering for territorial sustainability |
| PERIOD                    | 22-23                           | DURATION              | 90 hours  |

#### **DESCRIPTION:**

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingsicurezza/  |
| CONTACT<br>INFORMATION | giuseppe.bonifazi@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Geomatics for territorial monitoring plan (eng)

## Faculty of Civil and Industrial Engineering

Internal code

N/A

| LANGUAGE(S)               | English                         | LEVEL OF STUDY        | Master  |
|---------------------------|---------------------------------|-----------------------|---|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE    | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF STUDY | Safety Engineering for territorial sustainability |
|                           |                                 |                       | Safety Engineering for territorial sustainability |
| PERIOD                    | 22-23                           | DURATION              | 60 hours  |

#### **DESCRIPTION:**

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingsicurezza/   |
| CONTACT<br>INFORMATION | mattia.crespi@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Risk and territorial resilience

## Faculty of Civil and Industrial Engineering

Internal code

N/A

| LANGUAGE(S)               | English                         | LEVEL OF STUDY        | Master  |
|---------------------------|---------------------------------|-----------------------|---|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE    | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF STUDY | Safety Engineering for territorial sustainability |
|                           |                                 |                       | Safety Engineering for territorial sustainability |
| PERIOD                    | 22-23                           | DURATION              | 60 hours  |

#### **DESCRIPTION:**

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingsicurezza/   |
| CONTACT<br>INFORMATION | N/A  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Progettazione urbanistica

## Faculty of Civil and Industrial Engineering

Internal code 1023225

| LANGUAGE(S)               | Italian                          | LEVEL OF STUDY           | Master  |
|---------------------------|----------------------------------|--------------------------|---|
| CREDIT POINTS             | 12                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                          | DURATION                 | 120   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/5222a020-a60a-4213-9be3-9d8b3d7b9ad8?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |  |
|------------------------|---|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |  |
| CONTACT<br>INFORMATION | Antonio.Cappuccitti@uniroma1.it   |  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |  |









## TITLE: Progettazione architettonica e urbana

## Faculty of Civil and Industrial Engineering

Internal code 1018761

| LANGUAGE(S)               | Italian                          | LEVEL OF STUDY           | Master  |
|---------------------------|----------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                                | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                          | DURATION                 | 90  |

#### **DESCRIPTION:**

 $\frac{\text{https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/674723fe-9f7b-4c89-9a9f-d4619f1ba921?guid_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5\&current_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e$ 

| PREREQUISITES       | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |  |
|---------------------|---|--|
| WEBSITE             | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |  |
| CONTACT INFORMATION | Maria.Argenti@uniroma1.it   |  |
| REGISTRATION        | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |  |









## TITLE: Tecnica urbanistica con laboratorio progettuale

## Faculty of Civil and Industrial Engineering

Internal code

1047190

| LANGUAGE(S)               | Italian                          | LEVEL OF STUDY           | Master  |
|---------------------------|----------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                                | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                          | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/5b095a8b-1aee-4654-b83a-0040574ee410/abc6dd2a-7d80-4661-9b61-c238710dac21?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT<br>INFORMATION | Fabiola.Fratini@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Urbanistica con laboratorio progettuale

## Faculty of Civil and Industrial Engineering

Internal code 1047191

| LANGUAGE(S)               | Italian                          | LEVEL OF STUDY           | Master  |
|---------------------------|----------------------------------|--------------------------|---|
| CREDIT POINTS             | 12                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                          | DURATION                 | 120   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/4103056a-f874-4ade-b697-c68deb4be407/4845df17-e9d3-4899-95b2-ffb5f467792e?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT<br>INFORMATION | Claudia.Mattogno@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Architettura e composizione architettonica 3 con laboratorio progettuale

## Faculty of Civil and Industrial Engineering

Internal code 1022093

| LANGUAGE(S)               | Italian                          | LEVEL OF STUDY           | Master  |
|---------------------------|----------------------------------|--------------------------|---|
| CREDIT POINTS             | 12                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                          | DURATION                 | 120   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/7828d45a-7127-4854-a0bc-e8754a5d9bd2/25bb744c-32e5-45be-8417-26d67de4a4e2?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT<br>INFORMATION | ruggero.lenci@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Principi di Riabilitazione Strutturale

### Faculty of Civil and Industrial Engineering

Internal code 1047246

| LANGUAGE(S)               | Italian                       | LEVEL OF STUDY           | Master  |
|---------------------------|-------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                       | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/328f95de-6365-46db-a7de-374ca4401bdd?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT<br>INFORMATION | Domenico.Liberatore@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Elementi di Dinamica delle Strutture e Costruzioni Antisismiche

### Faculty of Civil and Industrial Engineering

Internal code 1047242

| LANGUAGE(S)               | Italian                       | LEVEL OF STUDY           | Master  |
|---------------------------|-------------------------------|--------------------------|---|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                       | DURATION                 | 60  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/c244efb1-c8b7-4f4c-9189-8ba5220f1368?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT<br>INFORMATION | Maurizio.DeAngelis@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Architettura tecnica e sostenibilità ambientale

### Faculty of Civil and Industrial Engineering

Internal code 1047245

| LANGUAGE(S)               | Italian                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             |                                 | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                         | DURATION                 |   |

#### **DESCRIPTION:**

 $\frac{\text{https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/51cbaf1e-71cd-4bf7-90f3-6712f32bea7a?guid_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5\&current_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e$ 

| PREREQUISITES       | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|---------------------|---|
| WEBSITE             | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT INFORMATION | Michele.Morganti@uniroma1.it  |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Restauro architettonico con Laboratorio progettuale

### Faculty of Civil and Industrial Engineering

Internal code 1021704

| LANGUAGE(S)               | Italian                       | LEVEL OF STUDY           | Master  |
|---------------------------|-------------------------------|--------------------------|---|
| CREDIT POINTS             | 12                            | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY | Ingegneria edile-<br>architetturaIngegneria<br>edile-architettura |
| PERIOD                    | annuale                       | DURATION                 | 120   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/29922/20210916103754/b031e471-4b3c-4c9f-984c-a413c4bb974e/a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5/f8de8f30-a3be-4ad3-b1b7-f1b5f17fef38/63adfd97-3b4a-46f0-a7a7-ddf83de01219?guid\_cv=a3c3dd3c-6a85-4937-b5b5-0d0b20da59c5&current\_erogata=b031e471-4b3c-4c9f-984c-a413c4bb974e

| PREREQUISITES       | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
|---------------------|---|
| WEBSITE             | https://corsidilaurea.uniroma1.it/it/corso/2021/29922/home  |
| CONTACT INFORMATION | Maria.GraziaTurco@uniroma1.it   |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Urban climatology

### Faculty of Civil and Industrial Engineering

Internal code 10599936

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 90   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-23af-4ce6-8cf4-45a886bfddf6/a1aeb258-0d26-4a32-ad26-6a9d776efa69?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-<br>23af-4ce6-8cf4-45a886bfddf6/a1aeb258-0d26-4a32-ad26-<br>6a9d776efa69?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | paolo.monti@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









### TITLE: Water and solid waste treatment plants

### Faculty of Civil and Industrial Engineering

Internal code

10595646

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9 CFU                           | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Environmental and<br>Sustainable Building<br>EngineeringEnvironme<br>ntal and Sustainable<br>Building Engineering |
| PERIOD                    | l semester                      | DURATION                 | 90  |

#### **DESCRIPTION:**

 $https://corsidilaurea.uniroma1.it/it/view-course-details/2020/30842/20200313105820/bbb7145d-7e1c-4377-99ed-9b5b1a461583/10239963-89ad-4166-9859-70b09549fc2e/d4cfd079-3003-43a6-b22e-8a2ba112ebef/b3769cc0-12dc-4887-acc6-419e3d8f0b1c?guid\_cv=10239963-89ad-4166-9859-70b09549fc2e\&current\_erogata=bbb7145d-7e1c-4377-99ed-9b5b1a461583$ 

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2020/30842/20200313105820/bbb7145d-7e1c-4377-99ed-<br>9b5b1a461583/10239963-89ad-4166-9859-70b09549fc2e/d4cfd079-<br>3003-43a6-b22e-8a2ba112ebef/b3769cc0-12dc-4887-acc6-<br>419e3d8f0b1c?guid_cv=10239963-89ad-41 |
|------------------------|---|
| WEBSITE                | web.uniroma1.it/sbe   |
| CONTACT<br>INFORMATION | paolo.viotti@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









# TITLE: Sustainable transport planning

# Faculty of Civil and Industrial Engineering

*Internal code* 1044026

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master   |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 12 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport<br>EngineeringTransport<br>Engineering |
| PERIOD                    | I semester                       | DURATION                 | 120  |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/transport-networks-and-vehicles-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/transport-networks-and-<br>vehicles-0  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/   |
| CONTACT<br>INFORMATION | luca.persia@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Railway Engineering

# Faculty of Civil and Industrial Engineering

*Internal code* 1044035

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master   |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 12 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport<br>EngineeringTransport<br>Engineering |
| PERIOD                    | I semester                       | DURATION                 | 120  |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/railway-engineering-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/railway-engineering-0  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/   |
| CONTACT<br>INFORMATION | stefano.ricci@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Urban and Regional Policy

# Faculty of Civil and Industrial Engineering

*Internal code* 1044015

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | I semester                       | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/urban-and-regional-policy-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/urban-and-regional-policy-0   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT<br>INFORMATION | mariavittoria.corazza@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Freight Transport and Logistics

# Faculty of Civil and Industrial Engineering

Internal code 1044041

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master   |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport<br>EngineeringTransport<br>Engineering |
| PERIOD                    | I semester                       | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/freight-transport-and-logistics-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/freight-transport-and-logistics-0  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/   |
| CONTACT<br>INFORMATION | luca.rizzetto@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Environmental economics and law

### Faculty of Civil and Industrial Engineering

Internal code

10600008

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 90   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-23af-4ce6-8cf4-45a886bfddf6/e271cfc8-88e9-48ef-804b-ed4da34c06c8?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-<br>23af-4ce6-8cf4-45a886bfddf6/e271cfc8-88e9-48ef-804b-<br>ed4da34c06c8?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records.   |









### TITLE: Gestione dei Rifiuti Solidi

### Faculty of Civil and Industrial Engineering

Internal code

N/A

| LANGUAGE(S)               | Italian                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria per<br>l'Ambiente e il<br>TerritorioIngegneria per<br>l'Ambiente e il Territorio |
| PERIOD                    | l semester                      | DURATION                 | #REF!   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1f31b6fe-7ad8-4027-8219-3d739bbb467d/7cc8e5b5-674f-428d-b906-523227cfb31a?guid\_cv=9beefd76-4bd1-45fd-a529-bf6f2edee571&current\_erogata=c82901e8-ddfa-4fc2-a896-af48071d75ae

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1f31b6fe-7ad8-4027-8219-3d739bbb467d/7cc8e5b5-674f-428d-b906-523227cfb31a?guid_cv=9beefd76-4bd1-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









# **TITLE:** Geolocation and Navigation

# Faculty of Civil and Industrial Engineering

Internal code 10599811

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale

| PREREQUISITES       | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|---------------------|---|
| WEBSITE             | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### **TITLE:** Engineering Geology

### Faculty of Civil and Industrial Engineering

*Internal code* 10589219

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Environmental and<br>Sustainable Building<br>EngineeringEnvironme<br>ntal and Sustainable<br>Building Engineering |
| PERIOD                    | l semester                      | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30425/20210916103754/712f61d5-52eb-426c-89fc-fa74e54c30ca/34400462-5d1c-40f3-b8e2-cd50c278b149/c5d06948-4acc-4812-b372-e535f0a79749/df372c46-0214-4778-a8d7-603ffc3f8f8b?guid\_cv=34400462-5d1c-40f3-b8e2-cd50c278b149&current\_erogata=712f61d5-52eb-426c-89fc-fa74e54c30ca

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30425/20210916103754/712f61d5-52eb-426c-89fc-<br>fa74e54c30ca/34400462-5d1c-40f3-b8e2-cd50c278b149/c5d06948-<br>4acc-4812-b372-e535f0a79749/df372c46-0214-4778-a8d7-<br>603ffc3f8f8b?guid_cv=34400462-5d1c-40 |
|------------------------|---|
| WEBSITE                | web.uniroma1.it/sbe   |
| CONTACT<br>INFORMATION | guseppe.sappa@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









### **TITLE:** Environmental Engineering

### Faculty of Civil and Industrial Engineering

Internal code 10589178

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Environmental and<br>Sustainable Building<br>EngineeringEnvironme<br>ntal and Sustainable<br>Building Engineering |
| PERIOD                    | l semester                      | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30425/20210916103754/712f61d5-52eb-426c-89fc-fa74e54c30ca/34400462-5d1c-40f3-b8e2-cd50c278b149/d156091b-1a8d-4674-ba66-497e64563728/578ab85f-e0a1-4af6-870f-2bf952cde7be?guid\_cv=34400462-5d1c-40f3-b8e2-cd50c278b149&current\_erogata=712f61d5-52eb-426c-89fc-fa74e54c30ca

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | web.uniroma1.it/sbe   |
| CONTACT<br>INFORMATION | agostina.chiavola@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Environmental geophysics

# Faculty of Civil and Industrial Engineering

Internal code 10599941

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 90   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale  |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Sustainable development and planning

### Faculty of Civil and Industrial Engineering

Internal code

10599944

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 90   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-23af-4ce6-8cf4-45a886bfddf6/9673a497-afd0-4a5d-a360-3d24fc4a3055?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/e2c2d212-<br>23af-4ce6-8cf4-45a886bfddf6/9673a497-afd0-4a5d-a360-<br>3d24fc4a3055?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | carlo.cellamare@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records.   |









# TITLE: Urban mining and recycling of materials

# Faculty of Civil and Industrial Engineering

*Internal code* 10599947

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | I semester                      | DURATION                 | 90   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Impianti di Trattamento dei Rifiuti Solidi

### Faculty of Civil and Industrial Engineering

Internal code 1017803

| LANGUAGE(S)               | Italian                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria per<br>l'Ambiente e il<br>TerritorioIngegneria per<br>l'Ambiente e il Territorio |
| PERIOD                    | l semester                      | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1f31b6fe-7ad8-4027-8219-3d739bbb467d/c4cf867b-2cea-48af-ab5f-b512f037615e?guid\_cv=9beefd76-4bd1-45fd-a529-bf6f2edee571&current\_erogata=c82901e8-ddfa-4fc2-a896-af48071d75ae

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-<br>af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1f31b6fe-<br>7ad8-4027-8219-3d739bbb467d/c4cf867b-2cea-48af-ab5f-<br>b512f037615e?guid_cv=9beefd76-4bd1-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









# TITLE: Traffic Engineering and ITS

# Faculty of Civil and Industrial Engineering

Internal code 10589554

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 12 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | I+II semester                    | DURATION                 | 120  |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/traffic-engineering-and-its-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/traffic-engineering-and-its-0   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT<br>INFORMATION | gaetano.fusco@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Advanced Methods in Mechanical Design

### Faculty of Civil and Industrial Engineering

Internal code 1047501

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Mechanical<br>EngineeringMechanical<br>Engineering |
| PERIOD                    | II semester                            | DURATION                 | 60   |

#### **DESCRIPTION:**

 $\frac{\text{https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-0f53034f67c0/8db393ad-fb18-44d7-bc9a-c28cddbdb6b7/eaf855c7-666d-4734-a3d4-3d547081ea89/e961ae88-190e-403c-90fd-ecbe2dc4ba4a?guid_cv=8db393ad-fb18-44d7-bc9a-c28cddbdb6b7&current_erogata=ca18c825-6838-4f26-b922-0f53034f67c0}$ 

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-<br>0f53034f67c0/8db393ad-fb18-44d7-bc9a-c28cddbdb6b7/eaf855c7-<br>666d-4734-a3d4-3d547081ea89/e961ae88-190e-403c-90fd-<br>ecbe2dc4ba4a?guid_cv=8db393ad-fb18-44 |
|------------------------|---|
| WEBSITE                | www.ingmecc.uniroma1.it   |
| CONTACT<br>INFORMATION | francesca.campana@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









### TITLE: Diagnostica delle Macchine e dei Sistemi Energetici

### Faculty of Civil and Industrial Engineering

Internal code 10592721

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Mechanical<br>EngineeringMechanical<br>Engineering |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-0f53034f67c0/2373c9a8-0832-42a8-9dd2-fa8419cfdba3/ade3cb2a-e976-44df-b3ab-da06876eb5df/46668f30-c195-437b-8ebe-9c2a57848b41?guid\_cv=2373c9a8-0832-42a8-9dd2-fa8419cfdba3&current\_erogata=ca18c825-6838-4f26-b922-0f53034f67c0

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-<br>0f53034f67c0/2373c9a8-0832-42a8-9dd2-fa8419cfdba3/ade3cb2a-<br>e976-44df-b3ab-da06876eb5df/46668f30-c195-437b-8ebe-<br>9c2a57848b41?guid_cv=2373c9a8-0832-42 |  |
|------------------------|---|--|
| WEBSITE                | www.ingmecc.uniroma1.it   |  |
| CONTACT<br>INFORMATION | alessandro.corsini@uniroma1.it  |  |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records.   |  |









### **TITLE:** Advanced Energy Conversion Systems

### Faculty of Civil and Industrial Engineering

Internal code

1051502

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9                               | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Mechanical<br>EngineeringMechanical<br>Engineering |
| PERIOD                    | II semester                     | DURATION                 | 90   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-0f53034f67c0/2373c9a8-0832-42a8-9dd2-fa8419cfdba3/ade3cb2a-e976-44df-b3ab-da06876eb5df/ca869781-6ff1-4883-a549-8d3707436ec6?guid\_cv=2373c9a8-0832-42a8-9dd2-fa8419cfdba3&current\_erogata=ca18c825-6838-4f26-b922-0f53034f67c0

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-<br>0f53034f67c0/2373c9a8-0832-42a8-9dd2-fa8419cfdba3/ade3cb2a-<br>e976-44df-b3ab-da06876eb5df/ca869781-6ff1-4883-a549-<br>8d3707436ec6?guid_cv=2373c9a8-0832-42 |
|------------------------|---|
| WEBSITE                | www.ingmecc.uniroma1.it   |
| CONTACT<br>INFORMATION | alessandro.corsini@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records.   |









# **TITLE:** Space Missions and systems

### Faculty of Civil and Industrial Engineering

Internal code

1051386

| LANGUAGE(S)               | English               | LEVEL OF STUDY        | Master   |
|---------------------------|-----------------------|-----------------------|--|
| CREDIT POINTS             | 6                     | LIMITED ATTENDANCE    | no   |
| THEMATIC CIVIS<br>AREA(S) | Other domain of study | OTHER DOMAIN OF STUDY | Ingegneria Spaziale e<br>Astronauticalngegneria<br>Spaziale e Astronautica |
| PERIOD                    | II semester           | DURATION              | 60   |

#### **DESCRIPTION:**

Fornire le conoscenze di base sul progetto di missioni spaziali e sui sistemi di navigazione e di controllo d'assetto di satelliti e sonde spaziali.

Capacità di dimensionare e progettare semplici sistemi di determinazione e di controllo dell'orbita e dell'assetto di satelliti e sonde spaziali.

Conoscenza dello sviluppo e delle operazioni di missioni spaziali.

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | www.ingaero.uniroma1.it   |
| CONTACT<br>INFORMATION | luciano.iess@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Impianti di Trattamento delle Acque

### Faculty of Civil and Industrial Engineering

Internal code

1017651

| LANGUAGE(S)               | Italian                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                               | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria per<br>l'Ambiente e il<br>TerritorioIngegneria per<br>l'Ambiente e il Territorio |
| PERIOD                    | II semester                     | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1c61205d-0c79-436a-9b77-4ec07d015b95/ab9ec2ae-7fda-4c15-9329-c1e70b15eb86?guid\_cv=9beefd76-4bd1-45fd-a529-bf6f2edee571&current\_erogata=c82901e8-ddfa-4fc2-a896-af48071d75ae

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2020/30845/20200313105820/c82901e8-ddfa-4fc2-a896-<br>af48071d75ae/9beefd76-4bd1-45fd-a529-bf6f2edee571/1c61205d-<br>0c79-436a-9b77-4ec07d015b95/ab9ec2ae-7fda-4c15-9329-<br>c1e70b15eb86?guid_cv=9beefd76-4bd1-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/   |
| CONTACT<br>INFORMATION | agostina.chiavola@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









### TITLE: Vehicle system dynamics and mechatronics

### Faculty of Civil and Industrial Engineering

Internal code

10592761

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Mechanical<br>EngineeringMechanical<br>Engineering |
| PERIOD                    | II semester                            | DURATION                 | 60   |

#### **DESCRIPTION:**

 $\frac{\text{https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-0f53034f67c0/9cbd7c34-3df8-4175-810e-7c96f9e407c6/eebe8abe-b71c-4773-b3c2-6bba1551e8b0/fb5f5fe8-efe2-493f-b1f4-f63c411e8408?guid\_cv=9cbd7c34-3df8-4175-810e-7c96f9e407c6\&current\_erogata=ca18c825-6838-4f26-b922-0f53034f67c0}$ 

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-<br>0f53034f67c0/9cbd7c34-3df8-4175-810e-7c96f9e407c6/eebe8abe-<br>b71c-4773-b3c2-6bba1551e8b0/fb5f5fe8-efe2-493f-b1f4-<br>f63c411e8408?guid_cv=9cbd7c34-3df8-41 |
|------------------------|---|
| WEBSITE                | www.ingmecc.uniroma1.it   |
| CONTACT<br>INFORMATION | antonio.carcaterra@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









### **TITLE: Smart factory**

### Faculty of Civil and Industrial Engineering

Internal code 1056573

| LANGUAGE(S)               | Italian                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Mechanical<br>EngineeringMechanical<br>Engineering |
| PERIOD                    | II semester                            | DURATION                 | 60   |

#### **DESCRIPTION:**

 $\frac{\text{https://corsidilaurea.uniroma1.it/it/view-course-details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-0f53034f67c0/9cbd7c34-3df8-4175-810e-7c96f9e407c6/eebe8abe-b71c-4773-b3c2-6bba1551e8b0/f106f011-0c23-40c7-a655-b24f080341ed?guid\_cv=9cbd7c34-3df8-4175-810e-7c96f9e407c6\&current\_erogata=ca18c825-6838-4f26-b922-0f53034f67c0$ 

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/30844/20210916103754/ca18c825-6838-4f26-b922-<br>0f53034f67c0/9cbd7c34-3df8-4175-810e-7c96f9e407c6/eebe8abe-<br>b71c-4773-b3c2-6bba1551e8b0/f106f011-0c23-40c7-a655-<br>b24f080341ed?guid_cv=9cbd7c34-3df8-41 |
|------------------------|---|
| WEBSITE                | www.ingmecc.uniroma1.it   |
| CONTACT<br>INFORMATION | francesco.costantino@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









# **TITLE:** Transport Policies

# Faculty of Civil and Industrial Engineering

Internal code 10589585

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/transport-policies-and-terminal-design-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/transport-policies-and-terminal-design-0   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/   |
| CONTACT<br>INFORMATION | chiara.colombaroni@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









### **TITLE:** Maritime Constructions

# Faculty of Civil and Industrial Engineering

Internal code 1044042

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/maritime-constructions-0

| PREREQUISITES       | https://web.uniroma1.it/cdaingtrasporti/maritime-constructions-0  |
|---------------------|---|
| WEBSITE             | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT INFORMATION | paolo.degirolamo@uniroma1.it  |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Transport Infrastructures

# Faculty of Civil and Industrial Engineering

Internal code 1044040

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/transport-infrastructures-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/transport-infrastructures-0   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT<br>INFORMATION | paola.dimascio@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Road Safety

# Faculty of Civil and Industrial Engineering

*Internal code* 10589572

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/road-safety-and-externalities-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/road-safety-and-externalities-0   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT<br>INFORMATION | davideshingo.usami@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Maritime Transport

# Faculty of Civil and Industrial Engineering

Internal code 1044038

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/maritime-transport-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/maritime-transport-0  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/  |
| CONTACT<br>INFORMATION | stefano.ricci@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Air Transport

# Faculty of Civil and Industrial Engineering

*Internal code* 1044037

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                           | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/air-transport

| CONTACT<br>INFORMATION | mariavittoria.corazza@uniroma1.it  Students should write to civis_openonlinecourses.ari@uniroma1.it |
|------------------------|---|
| REGISTRATION           | indicating the name and code of the course and enclosing a transcript of records.                   |









# **TITLE:** Transport Modeling and Planning

# Faculty of Civil and Industrial Engineering

Internal code 1044022

| LANGUAGE(S)               | English                          | LEVEL OF STUDY           | Master                                     |
|---------------------------|----------------------------------|--------------------------|--|
| CREDIT POINTS             | 12 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Cities, Territories,<br>Mobility | OTHER DOMAIN OF<br>STUDY | Transport EngineeringTransport Engineering |
| PERIOD                    | II semester                      | DURATION                 | 120  |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingtrasporti/transport-modelling-and-planning-0

| PREREQUISITES          | https://web.uniroma1.it/cdaingtrasporti/transport-modelling-and-<br>planning-0   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/cdaingtrasporti/   |
| CONTACT<br>INFORMATION | guido.gentile@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Assessment and sustainable use of environmental resources

### Faculty of Civil and Industrial Engineering

Internal code 10599950

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Remote sensing and Geo Big Data

### Faculty of Civil and Industrial Engineering

Internal code

10599940

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master  |
|---------------------------|---------------------------------|--------------------------|---|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no  |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria per<br>l'Ambiente e il<br>TerritorioIngegneria per<br>l'Ambiente e il Territorio |
| PERIOD                    | II semester                     | DURATION                 | 90  |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-aa94-499d-84e6-2abbbc9ae4c9/894e25ad-417b-4de7-bcab-9f78b8e704f8?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-<br>aa94-499d-84e6-2abbbc9ae4c9/894e25ad-417b-4de7-bcab-<br>9f78b8e704f8?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/   |
| CONTACT<br>INFORMATION | valerio.baiocchi@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records.  |









# TITLE: Groundwater management and conservation

# Faculty of Civil and Industrial Engineering

*Internal code* 10599949

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Coastal engineering

# Faculty of Civil and Industrial Engineering

*Internal code* 10599894

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Modelling of Environmental Pollution

# Faculty of Civil and Industrial Engineering

*Internal code* 10600009

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Policies and actions for climate change mitigation

# Faculty of Civil and Industrial Engineering

*Internal code* 10599948

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

| PREREQUISITES          | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Renewable energy

# Faculty of Civil and Industrial Engineering

*Internal code* 10599943

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

| PREREQUISITES       | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
|---------------------|---|
| WEBSITE             | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT INFORMATION | alessandra.polettini@uniroma1.it  |
| REGISTRATION        | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Hydraulic risk adaptation and mitigation measures

## Faculty of Civil and Industrial Engineering

Internal code

10599937

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 9 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 90   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-aa94-499d-84e6-2abbbc9ae4c9/2de07847-897c-4f0c-9f9b-f2e15e452ad1?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-<br>aa94-499d-84e6-2abbbc9ae4c9/2de07847-897c-4f0c-9f9b-<br>f2e15e452ad1?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | francesco.napolitano@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records.   |









# TITLE: Landslides and slope engineering

## Faculty of Civil and Industrial Engineering

Internal code 10599945

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master   |
|---------------------------|---------------------------------|--------------------------|--|
| CREDIT POINTS             | 6 ECTS                          | LIMITED ATTENDANCE       | no   |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY | Ingegneria<br>AmbientaleIngegneria<br>Ambientale |
| PERIOD                    | II semester                     | DURATION                 | 60   |

#### **DESCRIPTION:**

https://corsidilaurea.uniroma1.it/it/view-course-details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-aa94-499d-84e6-2abbbc9ae4c9/9778b064-a28a-4998-82f1-f2efe033fb5d?guid\_cv=ae82703b-3d86-451c-bbd4-1580012a1d9b&current\_erogata=eba72de2-f38e-4ecf-a289-59acacdd7f59

| PREREQUISITES          | https://corsidilaurea.uniroma1.it/it/view-course-<br>details/2021/31286/20210916103754/eba72de2-f38e-4ecf-a289-<br>59acacdd7f59/ae82703b-3d86-451c-bbd4-1580012a1d9b/159e3814-<br>aa94-499d-84e6-2abbbc9ae4c9/9778b064-a28a-4998-82f1-<br>f2efe033fb5d?guid_cv=ae82703b-3d86-45 |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/cdaingambientale/corsi-di-laurea/magistrale   |
| CONTACT<br>INFORMATION | angelo.amorosi@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records.   |









## TITLE: Formal Methods in Software Development

## Faculty of I3S

Internal code 1047626

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | l sem                                  | DURATION                 | 60                                     |

#### **DESCRIPTION:**

General goals: The course is aimed to the acquisition of logical and modeling knowledge needed to verify complex hardware/software systems (model checking).

Specific goals - Knowledge and understanding: At the end of the course, students will have full understanding of the presented modeling tools (model checkers).

Apply knowledge and understanding: Students will be able to use the tools and the techniques presented during the course, but also to deepen the study independently by consulting other texts dedicated to the subject and scientific material that concerns it.

Critical and judgmental skills: The acquired knowledge will allow students to face the applications proposed in other teachings and to face the problems that will be proposed in the working career in terms of modeling systems.

Communication skills: Students are stimulated to expose and communicate experiences in the circle of their colleagues.

Ability to continue the study: The course deals only with some of the fields proposed, but also gives news of a wide range of techniques that can be used in this field in so that he can critically choose as appropriate.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | melatti@di.uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Network algorithms

## Faculty of I3S

Internal code 1047640

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | l sem                                  | DURATION                 | 60                                     |

#### **DESCRIPTION:**

General objectives: Acquire knowledge on the design of complex algorithms to solve graph problems that model problems inherent in networks (wired, wireless and of sensors).

Specific goals - Knowledge and understanding: At the end of the course students will know the basic methodologies for the analysis of problems related to networks and the identification of graph problems that are closer; they will also know the algorithms for solving some of the main problems on graphs.

Apply knowledge and understanding: At the end of the course students will have become familiar with the analysis of problems related to networks. They will be able to recognize which is the graph problem that is closer and - reworking existing ones - to design new data structures and related algorithms to solve the starting problem.

Critical and judgmental skills: Students will be able to analyze the quality of a network algorithm, both from the effective resolution of the problem and from the time complexity point of views.

Communication skills: Students will acquire the ability to expose their knowledge in a clear and organized way, which will be verified through the oral examination.

Learning ability: Once the cycle of studies is completed, the acquired knowledge will allow students to face real problems in a critical and effective way and to design efficient solutions.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | calamo@di.uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Automatic Software Verification Methods

## Faculty of I3S

Internal code

1047615

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | l sem                                  | DURATION                 | 60                                     |

#### **DESCRIPTION:**

General goals: The course aims at presenting methods and tools for automatic verification and validation of cyber-physical systems.

Specific goals: The course aims at making students proficient in the comprehension and application of advanced modelling, verification and validation techniques for cyber-physical systems.

Knowledge and understanding: A wide-spectrum introduction to the foundational principles of modelling and analisys of cyberphysical systems modelled as DAE (Differential Algebraic Equations).

Applying knowledge and understanding: The successful student will be able to exploit the portfolio of techniques and the different approaches shown in the course for the modelling, verification and validation of cyber-physical systems.

Critical and judgmental abilities: Students will be able to take autonomous and rational decisions on the most effective techniques to employ for the modelling, verification and validation of cyber-physical systems.

Communication skills: Students will be able to interact proficiently with domain experts on a wide set of topics concerning modelling, verification and validation of cyber-physical systems.

Learning abilities: Students will be able to extend their skills in the subjects of this course, by the autonomous reading of relevant scientific literature.

| PREREQUISITES          | No  |
|------------------------|---|
| CONTACT<br>INFORMATION | tronci@di.uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Computational Complexity

## Faculty of I3S

*Internal code* 1047616

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | l sem                                  | DURATION                 | 60                                     |

#### **DESCRIPTION:**

General goals: This represents a basic course about the Theory of Computational Complexity Specific goals:

- Theoretical model of resource running time
- Theoretical model ofresource memory occupation
- Time and Space complexity classes
- The P = NP problem
- Unfeasible problems when resources are bounded
- Computational Classes L, P, NP, PSPACE, BPP, #P, IP,
- Main Results
- Boolean Circuit and functions

Knowledge and understanding:

The student will acquire:

- 1. The ability to verify reduction and completeness properties between computational problems.
- 2. Knowledge of the main theorems in the field of Complexity Theory
- 3. Capabilities of mathematical reasoning on the computational nature of computational resources like running-time, memory occupation, randomness

Applying knowledge and understanding: The knowledge acquired is basic and foundational in fields like Software Verification, Game Theory, Analysis of Algorithms









Critical and judgmental skills: Enabling autonomous thinking in students by deepening their ability of mathematical reasoning through the development of discrete math techniques and functional analysis abilities.

Communication skills: Developing students' ability to communicate advanced results in the field of Theoretical computer Science

Ability of learning: Knowledge about Computational Complexity is necessary to evaluate the computational viability of the solution of any computational problem arising in the real world. Its knowledge is hence fundamental and basic in many Computer Science disciplines like Cryptography, Verification, Artificial Intelligence, Game Theory.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | galesi@di.uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Productivity and Efficiency Analysis

### Faculty of I3S

Internal code 1041412

| LANGUAGE(S)               | English                                | LEVEL OF STUDY        | Master  |
|---------------------------|--|-----------------------|---|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE    | No  |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF STUDY | Management<br>EngineeringManageme<br>nt Engineering |
| PERIOD                    | l sem                                  | DURATION              | 60  |

#### **DESCRIPTION:**

The course, with an interdisciplinary approach, combines theoretical lectures on the economics of production, with lectures on the main econometric approaches proposed in the literature, including recent developments, and practical sessions to introduce to the main open source software available to carry out productivity and efficiency analysis.

The main objectives of the course are:

- Present a general overview on the economic theory of productivity and efficiency;
- Propose a unified framework on the main methodologies available to estimate and compare productivity and efficiency of Decision Making Units (DMUs);
- Make an introduction to the main open source software available to estimate productivity and efficiency;
- Provide laboratory sessions to implement productivity and efficiency analyses in practice;
- Provide the basic concepts to analyse the specialised literature;
- Interact with students through assisted laboratory and the realization of a practical work on real data, seminars and oral presentations.

#### Specific Objectives

- KNOWLEDGE AND UNDERSTANDING: DEMONSTRATE THE KNOWLEDGE OF THE BASIC ELEMENTS OF PRODUCTIVITY AND EFFICIENCY ANALYSIS;
- ABILITY TO APPLY KNOWLEDGE AND UNDERSTANDING: TO BE ABLE TO APPLY EFFICIENCY ANALYSIS TECHNIQUES LEARNED DURING THE COURSE IN ITS OWN ENGINEERING AREA OF SPECIALIZATION;









- JUDGMENT AUTONOMY: TO BE ABLE TO PERFORM AN EFFICIENCY ANALYSIS WITH CRITICAL SPIRIT, CHOOSING THE APPROPRIATE METHOD AND CORRECTLY IMPLEMENTING IT.
- COMMUNICATION SKILLS: BEING ABLE TO COMMUNICATE THE RESULTS OF THE ANALYSIS AND ITS INFORMATION TO DIFFERENT TYPES OF INTERLOCUTORS;
- LEARNING SKILLS: TO DEVELOP THE NECESSARY SKILLS TO APPLY AND DEVELOP AUTONOMOUSLY THE METHODS LEARNED DURING THE COURSE.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | daraio@diag.uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Electives in Artificial Intelligence

## Faculty of I3S

Internal code 1056413

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>EngineeringComputer<br>Engineering |
| PERIOD                    | I sem                                  | DURATION                 | 60   |

#### **DESCRIPTION:**

General objectives: The aim of the course, which is the most advanced within the Master's Degree in Artificial Intelligence and Robotics, is to provide an overview to the following research topics: learning methods in computational vision, model recognition, human-robot interaction and cognitive robotics.

The topics are presented by active researchers in these fields in order to present the student with research problems and relevant and recent application themes in Artificial Intelligence and Robotics. To this end, the courses include both the presentation and discussion of scientific articles, and an advanced project work.

The learning objective of the course is to provide the knowledge needed to undertake research work in these fields using practical tools for experimental validation.

#### Specific objectives.

Knowledge and understanding: The course is the most advanced in the Master for Artificial Intelligence and Robotics and offers an overview of different research topics, such as: learning methods in computational vision, pattern recognition, person-robot interaction, and automatic reasoning in robots.

The topics are covered by researchers active in the field and with the aim of introducing the student to research problems and recent and relevant applications in Artificial Intelligence and Robotics.

Applied knowledge and understanding: The course provides the knowledge necessary to undertake research work in these fields using practical tools for experimental validation.

Critical and judgment skills: The course proposes advanced methods to study, understand and apply results reported on scientific articles, and integrate these results to create innovative Artificial Intelligence applications. The student learns how to use results from the literature as a basis for new research.









Communication skills: Group activities in the classroom and the need to make presentations to the class allow the student to develop the ability to communicate and share the knowledge acquired and to compare herself with others on the topics of the course.

Learning ability: In addition to the classic learning skills provided by the theoretical study of the teaching material, the course develops methods stimulate the student to deepen his knowledge of some of the topics she presents to the course and to the work group. Furthermoe the course stimulates the student to effectively apply both the concepts and the techniques learned during the course.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | cnapoli@diag.uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Optimization Methods for Machine Learning

### Faculty of I3S

Internal code 1041415

| LANGUAGE(S)               | English                                | LEVEL OF STUDY        | Master   |
|---------------------------|--|-----------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE    | No   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF STUDY | Computer<br>EngineeringComputer<br>Engineering |
| PERIOD                    | l sem                                  | DURATION              | 60   |

#### **DESCRIPTION:**

Introduction. Definition of learning systems. Goals and applications of machine learning (classification and regression). Basics on statistical learning theory (Vapnik Chervonenkis bound). Underfitting and Overfitting. Use of data: training set, test set, validation set. 2. Artificial Neural Networks. Neurons and biological motivation. Linear threshold units. The Perceptron and its learning algorithm (proof of convergence). Classification of linearly separable patterns. Multi-Layer Feedforward Neural Networks. Gradient method: basics. Back-propagation (BP) algorithm. BP batch version: proof of convergence and choice of the learning rate. BP on-line version: incremental method, theorem of convergence. Momentum updating rule. Radial-Basis function (RBF) networks: regularized and generalized RBF networks. Their use in interpolation and approximation. learning strategies and error functions. Unsupervised selection of center. Supervised selection of weights and centers: decomposition methods into two blocks and decomposition methods into more blocks. Convergence theory of decomposition methods. Early stopping 3. Support Vector Machines (Kernel methods) Soft and hard Maximum Margin Classifiers. Quadratic programming formulation of the soft/hard maximum margin separators. Kernels methods. Dual formulation of the primal QP problem. Wolfe duality theory for QP. KKT conditions. Frank Wolfe method: basics. Decomposition methods: SMO-type algorithms, MVP algorithm, SVMlight, cyclic methods. Convergence theory. Implementation tricks: Caching, shrinking. Choosing parameters: k-fold cross-validation. Multiclass SVM problems: one-against-one and oneagainst-all. 4. Practical use of learning algorithms. 5. Comparing learning algorithms from the optimization point of view. 6. Use of standard software (Weka, LIBSVM)

| PREREQUISITES | No |
|---------------|----|
| WEBSITE       |    |









| CONTACT      | laura.palagi@uniroma1.it   |
|--------------|--|
| INFORMATION  |  |
| REGISTRATION | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Electromagnetics and Radar Meteorology

## Faculty of I3S

Internal code

10593374

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Electonical<br>EnigineeringElectonical<br>Enigineering |
| PERIOD                    | l sem                                  | DURATION                 | 60   |

#### **DESCRIPTION:**

#### **OBJECTIVES**

Main goals are:

- to introduce the classical electromagnetic vector field theory and its main theorems;
- to derive properties of plane and spherical waves and the related reflection and refraction phenomena;
- to provide the basics of electromagnetic radiation theory, radiopropagation and particle scattering;
- to provide the basics of clouds and precipitation microphysics and the related radar observables;
- to describe the microwave Doppler polarimetric radar sensor principles and basic equations;
- to illustrate the main applications of radar meteorology and data processing.

OUTCOMES (Dublin descriptors: knowledge, understanding, explain, skill, ability)

After the successful completion of this module, the student should be able to:

- know the basic principles of electromagnetics and radar meteorology;
- identify the appropriate analytical techniques to approach an electromagnetic problem;
- understand the different processes involved within wave propagation and scattering in atmosphere;
- explain the signature of meteorological radar measurements for various applications;
- show skills for reading and understanding main scientific literature and texts on related topics;
- demonstrate the ability to process meteorological data and develop own algorithms.

| PREREQUISITES | No  |
|---------------|---|
| WEBSITE       |   |
| CONTACT       | frank.marzano@uniroma1.it   |
| INFORMATION   |   |
|               | Students should write to civis_openonlinecourses.ari@uniroma1.it      |
| REGISTRATION  | indicating the name and code of the course and enclosing a transcript |
|               | of records.   |









## **TITLE:** Optoelectronics

### Faculty of I3S

Internal code 1041744

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master   |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Electonical<br>EnigineeringElectonical<br>Enigineering |
| PERIOD                    | l sem                                  | DURATION                 | 60   |

#### **DESCRIPTION:**

#### KNOWLEDGE AND UNDERSTANDING.

Students will acquire a consistent knowledge of phenomena, materials, devices and optoelectronic techniques related to the generation, detection and processing of optical signals, to the photovoltaics for solar energy conversion, for reduction of power consumption.

### CAPABILITY TO APPLY KNOWLEDGE AND UNDERSTANDING.

Students will acquire capabilities to design and to evaluate performance of devices according to the

specifications provided, both by lectures and laboratory experiences, for specific applications from telecom, to sensors, to optical instrumentation.

#### MAKING AUTONOMOUS JUDGEMENTS.

Students will acquire the expertise to design and to evaluate performance of most optoelectronic devices for any optoelectronic system.

#### COMMUNICATE SKILLS.

Students will acquire the capabilities to communicate in both written and oral form on the contents of the course, by means of written reports and oral discussions both in the classroon and during the exam.

#### LEARNING SKILLS.

Students will acquire the capabilities to learn the contents of the course by several means using lecture notes, books, technical and scientific literature available on web, laboratory experiences as indicated by the teacher.









| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | antonio.dalessandro@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Concurrent Systems

### Faculty of I3S

Internal code 1047619

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | II sem                                 | DURATION                 | 60                                     |

#### **DESCRIPTION:**

#### General goals:

Understanding the basic concepts of concurrent systems and the methodologies used for solving the problems they yield

#### Specific goals:

Mutual exclusion, different liveness properties, semaphores, monitors, transactions, mutex-free concurrency, other liveness properties, universal object and consensus. Labelled transitions systems, interleaving semantics, synchronization, simulation and bisimulation, verification techniques, name passing, type systems.

#### Knowledge and comprehension:

Understanding the basic issues of concurrent systems and their possible solutions, the foundational principles of a concurrent programming language and the possible verification techniques.

#### Applying knowledge and comprehension:

ability of solving basic problems of simple concurrent systems

### Capabilities of critiquing and assessing:

understanding advantages and disadvantages of the different possible solutions of problems in concurrent systems

#### Communication skills:

developing a technical and formal language, able to explain the proposed solutions and their relative merits









### Learning skills:

ability in understanding complex programming scenarios and the relative solutions, even complex

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | gorla@di.uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |







# TITLE: cloud computing

## Faculty of I3S

Internal code 1047205

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | II sem                                 | DURATION                 | 60                                     |

#### **DESCRIPTION:**

#### General Objectives:

The purpose of the course is to give students the basic concepts of distributed systems and then to focus on cloud computing technologies. The course cover theoretical and practical aspects with a focus on real examples. At the end of the course students are supposed to be capable to chose, setup and use cloud services and to design and deploy scalable architectures and elastic applications.

#### Specific Objectives:

Knowledge and understanding:

On completion of the course, the student will be be able to describe and to explain

- the general concepts related to distributed systems
- the concepts of system and application virtualization
- the mechanisms and algorithms used in cloud computing
- the technologies for cloud storage
- the big data processing frameworks
- the cyber security issues and solutions in cloud computing

Applying knowledge and understanding:

On completion of the course, the student will be able:

- to design and to implement a scalable architecture and to deploy an elastic application
- to write and to present practical results in the form of technical report









- to analyze and to present scientific work
- to select, to configure and to run cloud services by using management GUI and API offered by laaS providers
- to design and to configure elastic infrastructure and to deploy elastic applications.
- to make design choices that account for cyber security issues

#### Making judgements:

On completion of the course, the student will:

- be capable to assess and to compare cloud technologies and cloud services, as well as big data processing frameworks
- be capable to identify, to assess and to compare state of the art solutions
- strengthen his/her critical thinking ability

#### Communication skills:

On completion of the course, the student will:

- be capable to discuss on and to convey his/her own opinion on cloud technologies
- be capable to present the analysis of a selected topic to a wide audience

#### Learning skills:

During the course, the student will develop and will enhance his/her critical thinking skill by means of studying and analyzing scientific work and technical documentation. Moreover, the student will improve his/her capability to integrate information from different sources, e.g. books, technical/scientific papers, practical experiences.

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | casalicchio@di.uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Marketing and Innovation Management

## Faculty of I3S

Internal code 1041411

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master  |
|---------------------------|--|--------------------------|---|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No  |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Management<br>EngineeringManageme<br>nt Engineering |
| PERIOD                    | II sem                                 | DURATION                 | 60  |

#### **DESCRIPTION:**

#### **GENERAL OBJECTIVES**

The course provides students with the basic principles and tools useful for Marketing and Innovation Management. Specifically, the course aims at teaching students: the main forces of the marketing environment; the management of marketing information to gain customer insights; consumer and business buyer behaviors; steps and tools to define and implement a marketing strategy; sources, types and patterns of innovation; standards battles and design dominance; the timing of entry; the mechanisms to protect innovation; the new product development process; the integration of environmental sustainability into marketing strategy and new product development. Further, through the analysis of several case studies, the course aims at stimulating analytical skills, which will allow students to understand and explain firm behavior and the related market results in the domain of marketing and technological innovation strategies, by applying principles and tools learnt during the course.

#### SPECIFIC OBJECTIVES

KNOWLEDGE AND UNDERSTANDING. The course will allow a comprehension of the fundamental concepts and tools of Marketing and Innovation Management. The students will learn to recognize and to master the best practices and success factors of Marketing and Innovation Management and to apply them in real contexts.

CAPABILITY TO APPLY KNOWLEDGE AND UNDERSTANDING. Through the course students will be able to develop a marketing plan, critically evaluate marketing and technological innovation strategies of firms, classify products based on their environmental impact.

MAKING AUTONOMOUS JUDGEMENTS. After the course, the student will be able to choose, given the main environmental forces, firm and innovation characteristics, the best marketing and technological innovation strategies. In addition, the student will develop the critical analysis capacity of marketing and innovation management.









COMMUNICATION SKILLS. At the end of the course the students will be able to illustrate the concepts of marketing and innovation management using internationally consolidated terminology and models, to organize information and data according to a format and a reporting process comprehensible to professionals.

LEARNING SKILLS. The student will develop the capability to autonomously study and critically understand and evaluate marketing and technological innovation strategies and related tools.

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | rosamaria.dangelico@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Economics of Network Industries

## Faculty of 13S

Internal code 1047212

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master  |
|---------------------------|--|--------------------------|---|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No  |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Management<br>EngineeringManageme<br>nt Engineering |
| PERIOD                    | II sem                                 | DURATION                 | 60  |

#### **DESCRIPTION:**

1. Demand and technology in network industries: Network effects and externalities; Economies of scale and scope; Compatibility and standardization 2. Market organization in network industries: Vertical structure; Vertical and horizontal mergers; 3. Market power and pricing strategies in network industries: Switching costs and lock-in; Bundling and tying; 4. Telecommunications: Natural monopoly and sunk costs; Regulation; Liberalization of markets; 5. Two-sided markets and platforms: Key features and pricing issues; The Internet network; 6. Antitrust policies in network industries

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | reverberi@diag.uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









### **TITLE: Data Driven Economics**

## Faculty of I3S

Internal code 1056129

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master  |
|---------------------------|--|--------------------------|---|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No  |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Management<br>EngineeringManageme<br>nt Engineering |
| PERIOD                    | II sem                                 | DURATION                 | 60  |

#### **DESCRIPTION:**

A first objective of the course is to provide a basic toolbox for the analysis of agent and group interaction under uncertainty and asymmetric information, and its main consequences on markets enabled from large-scale digital platforms.

A second objective of the course will be to provide the basic methods for the use of big data for estimating relevant economic indices.

The active participation of students will be stimulated with game-theoretic examples, presentations, simple experiments, case-studies and projects involving the use of real-world data.

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | marco.marini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: Satellite Earth Observation

### Faculty of I3S

Internal code 1047218

| LANGUAGE(S)               | English                                | LEVEL OF STUDY        | Master   |
|---------------------------|--|-----------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE    | No   |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF STUDY | Electonical<br>EnigineeringElectonical<br>Enigineering |
| PERIOD                    | II sem                                 | DURATION              | 60   |

#### **DESCRIPTION:**

INTRODUCTION AND FOUNDATIONS. Definition of remote sensing. Elements of physics: electromagnetic waves, radiative quantities (power density, radiance, emissivity); thermal emission; Planck and Stefan-Boltzmann laws; absorption and scattering phenomena. Atmospheric effects in spaceborne and airborne remote sensing. The electromagnetic spectrum and its use for remotely sensing the Earth; visible, infrared and microwave bands. CLASSIFICATION OF REMOTE SENSING SENSORS. Parameters to characterize sensor performances and product quality; geometric, radiometric and spectral resolutions; geometric accuracy and sensor coverage. Microwave radiometers. Active microwave sensors (radar) main characteristics (SLAR, SAR, wind scatterometer, radar altimeter). Radar images radiometric and geometric properties. Principles of visible and infrared radiometers (mechanical scanning and pushbroom radiometers). ENVIRONMENTAL DATA, MODELS AND ALGORITHMS. Spectral properties of the sea, soil and vegetation surfaces in the visible and near infrared spectral ranges. Applications and algorithms for visible and near infrared radiometers. Retrieval algorithms of sea surface temperature. Scattering properties of sea and soil surfaces in the microwave bands. Applications and algorithms for microwave radiometry of atmosphere, soil and vegetation. Applications and algorithms for radar remote sensing and radar interferometry. EARTH OBSERVATION SATELLITES. Space and ground segments of an Earth observation system. Radiometric, spectral, spatial and temporal requirements of an Earth observation mission. Main orbits for remotely sensing the Earth. Overview of LANDSAT, SPOT, TIROS, METEOSAT, ERS-1/2, Envisat, Sentinel missions. DMSP, MetOp platforms and "high resolution" satellites. DATA PROCESSING AND IMAGE INTERPRETATION. Standard methods to perform image geometric correction and radiometric calibration. Forward and inverse problem. Bayesian theory, regression analysis and image classification. Bio-geophysical paramater detection and estimation and product generation. Ground-segment data handling, processing, storage. Software packages for data processing and analysis.









| WEBSITE                |  |
|------------------------|--|
| CONTACT<br>INFORMATION | nazzareno.pierdicca@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE: Big Data Computing**

## Faculty of I3S

Internal code 1041764

| LANGUAGE(S)               | English                                | LEVEL OF STUDY           | Master                                 |
|---------------------------|--|--------------------------|--|
| CREDIT POINTS             | 6                                      | LIMITED ATTENDANCE       | No                                     |
| THEMATIC CIVIS<br>AREA(S) | Digital & technological transformation | OTHER DOMAIN OF<br>STUDY | Computer<br>ScienceComputer<br>Science |
| PERIOD                    | II sem                                 | DURATION                 | 60                                     |

#### **DESCRIPTION:**

#### General goals:

The course is aimed at training students on fundamental algorithmic and programming techniques in big-data computing, tackling a variety of data mining problems on computational models used for managing massive information structures.

#### Specific goals:

#### Knowledge and understanding:

At the end of the course the students will have deep understanding of programming models for distributed data analysis on large clusters of computers, as well as of advanced computational models for processing massive amounts of data (e.g., data streaming, MapReduce-style parallelism, and I/O-efficient algorithms).

#### Apply knowledge and understanding:

#### Students will be able t

o design and analyze algorithms in different big data settings, to write efficient code taking into account architectural features of modern computing platforms (including distributed systems), and to make use of good programming practices and advanced programming frameworks, such as Hadoop.

#### Critical and judgmental skills:

Students will be able to distinguish the proper settings in which to use different computational paradigms for big data analysis, to evaluate the advantages and disadvantages of each model, and to face challenges arising in the design and implementation of diverse big data applications.

#### Communication skills:









The students will be able to communicate effectively, summarizing the main ideas in the design of big data systems and algorithms clearly and presenting accurate technical information.

#### Ability of learning:

The goal for the class is to be broad and to touch upon a variety of techniques, introducing standard practices as well as cutting-edge research topics in this area, making it possible for the students to extend their knowledge independently according to technological changes and evolution.

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION | tolomei@di.uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: BUSINESS LAW**

# Faculty of Law

Internal code 1052118

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master   |
|---------------------------|-------------------------------|--------------------------|----------|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | no       |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |          |
| PERIOD                    | First semester                | DURATION                 | 72 hours |

#### **DESCRIPTION:**

The course aims to illustrate the relationships between law and economics, between legal and economic culture, antitrust legislation, as well as the regulation of the market, services and financial markets.

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/31302/home  |
| CONTACT<br>INFORMATION | luca.didonna@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: LAW AND ECONOMICS I

# Faculty of Law

*Internal code* 1051725

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master   |
|---------------------------|-------------------------------|--------------------------|----------|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | no       |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |          |
| PERIOD                    | First semester                | DURATION                 | 72 hours |

#### **DESCRIPTION:**

The course aims to provide the student with the theoretical tools of the economic analysis of law and the knowledge necessary for their application to European integration issues.

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/31302/home  |
| CONTACT<br>INFORMATION | valeria.debonis@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: COMPARATIVE AND EUROPEAN PRIVATE LAW

## Faculty of Law

Internal code 1052117

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master   |
|---------------------------|-------------------------------|--------------------------|----------|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | No       |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |          |
| PERIOD                    | First semester                | DURATION                 | 72 hours |

#### **DESCRIPTION:**

The course aims to deepen the theoretical and practical knowledge of European private law - especially in the light of the process of community integration - through the recognition of the areas in which the community discipline has affected relations between individuals, with particular regard to contracts and liability. civil

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/31302/home  |
| CONTACT<br>INFORMATION | guido.alpa@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: EUROPEAN COMPANY LAW**

# Faculty of Law

Internal code 1056319

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master   |
|---------------------------|-------------------------------|--------------------------|----------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | No       |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |          |
| PERIOD                    | Second Semester               | DURATION                 | 48 hours |

#### **DESCRIPTION:**

The course will explore the main issues which arise in the field of company law in the framework of the European Community legal order

| PREREQUISITES          | Not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/31302/home  |
| CONTACT<br>INFORMATION | alessandra.paolini@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE: EUROPEAN UNION LAW**

## Faculty of Law

*Internal code* 1052119

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master   |
|---------------------------|-------------------------------|--------------------------|----------|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | no       |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |          |
| PERIOD                    | Second Semester               | DURATION                 | 72 hours |

#### **DESCRIPTION:**

The course aims to represent and illustrate the main features of European Union law, with particular reference to the institutional and regulatory changes introduced by the Lisbon Treaty.

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/31302/home  |
| CONTACT<br>INFORMATION | emanuele.cimiotta@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Geomaterials for Cultural Heritage

## Faculty of Mathematics, Physical and Natural Sciences

Internal code 10589750

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master        |
|---------------------------|-------------------------------|--------------------------|---------------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | No            |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |               |
| PERIOD                    | l semester                    | DURATION                 | 52 h, 4h/week |

#### **DESCRIPTION:**

The course concerns the study of the ancient geo-materials in the field of cultural heritage (e.g., stone, ceramics, glass, plasters); their nature, production processes and degradation. In addition, the recent innovative scientific methods used in their characterization will be presented using case studies. This information will allow students to independently develop a research project which will be set during the laboratory hours and evaluated at the end of the course.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_dba302/en  |
| CONTACT<br>INFORMATION | laura.medeghini@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Plant biology and conservation for Cultural Heritage

## Faculty of Mathematics, Physical and Natural Sciences

Internal code

10600330

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master  |
|---------------------------|-------------------------------|--------------------------|---|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | No  |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |   |
| PERIOD                    | I semester                    |                          | 80 h (of which 24 h in<br>the field), 6h/week |

#### **DESCRIPTION:**

Plants have always been a main resource for humans. The course investigates the climate-plants interactions along the human history, since before the dawn of agriculture. Diagnostic and tools to know and preserve our cultural heritage will be taught as well. The course has also field trips in historical Italian sites (e.g. Pompeii, Herculaneum, Pyrgi) and museums.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_dba302/en  |
| CONTACT<br>INFORMATION | laura.sadori@uniroma1.it, gabriele.favero@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Applied geosciences and bioconservation laboratory

## Faculty of Mathematics, Physical and Natural Sciences

Internal code

10600331

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master        |
|---------------------------|-------------------------------|--------------------------|---------------|
| CREDIT POINTS             | 9                             | LIMITED ATTENDANCE       | No            |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |               |
| PERIOD                    | l semester                    | DURATION                 | 72 h, 6h/week |

#### **DESCRIPTION:**

The course is focused on the analytical methods belonging to the earth sciences that can be applied in the study of cultural heritage and on the basic knowledge of the bioconservation: selection and recognition of the microbial community present on an artwork; evaluation of the biodeterioration and the identification of the best strategy for the bioconservation.

| PREREQUISITES          |   |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip_dba302/en   |
| CONTACT<br>INFORMATION | teresa.rinaldi@uniroma1.it; laura.medeghini@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Neuropharmacology of motivational processes

# Faculty of Mathematics, Physical and Natural Sciences

Internal code

1052232

| LANGUAGE(S)               | English    | LEVEL OF STUDY        | Master                    |
|---------------------------|------------|-----------------------|---------------------------|
| CREDIT POINTS             | 6          | LIMITED ATTENDANCE    | No                        |
| THEMATIC CIVIS<br>AREA(S) | Health     | OTHER DOMAIN OF STUDY | NeuroscienceNeuroscie nce |
| PERIOD                    | l semester | DURATION              | 48 h                      |

#### **DESCRIPTION:**

Provide an overview of the neuropharmacology of motivational processes

| PREREQUISITES          | Basic Knowledge of Neurophysiology, Biochemistry  |
|------------------------|---|
| WEBSITE                | http://bbcd.bio.uniroma1.it/bbcd/en   |
| CONTACT<br>INFORMATION | daniele.caprioli@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Molecular plant pathology: the main strategies of integrated pest management

Faculty of Mathematics, Physical and Natural Sciences

Internal code 600068

| LANGUAGE(S)           | English                         | LEVEL OF STUDY           | Master |
|-----------------------|---------------------------------|--------------------------|--------|
| CREDIT POINTS         | 6                               | LIMITED ATTENDANCE       | No     |
| 11121117 (1110 011110 | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY |        |
| PERIOD                | I semester                      | DURATION                 | 52 h   |

#### **DESCRIPTION:**

Provide knowledge on the molecular aspects of plant-pathogen interactions. Study how pathogens counteract plant defense response and establish resistance.

| PREREQUISITES          | Basic Knowledge of cellular and system biology   |
|------------------------|--|
| WEBSITE                | http://bbcd.bio.uniroma1.it/bbcd/en  |
| CONTACT<br>INFORMATION | luigi.faino@uniroma1.it  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Smart materials for conservation in Archaeology

## Faculty of Mathematics, Physical and Natural Sciences

Internal code

10596381

| LANGUAGE(S)               | English                       | LEVEL OF STUDY           | Master        |
|---------------------------|-------------------------------|--------------------------|---------------|
| CREDIT POINTS             | 6                             | LIMITED ATTENDANCE       | No            |
| THEMATIC CIVIS<br>AREA(S) | Society, Culture,<br>Heritage | OTHER DOMAIN OF<br>STUDY |               |
| PERIOD                    | l semester                    | DURATION                 | 60 h, 4h/week |

#### **DESCRIPTION:**

The course is divided into two modules: "smart materials" and "geomaterials". The first concerns the nature, production and application of nanomaterials and smart materials for the conservation and protecion of mobile and immobile cultural heritage; the second is on the analysis of ancient geo-materials in the field of cultural heritage (e.g., stone, ceramics, glass, plasters): their nature, production processes and degradation.

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_dba302/en  |
| CONTACT<br>INFORMATION | marialaura.santarelli@uniroma1.it, laura.medeghini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Neuropsychopharmacology

# Faculty of Mathematics, Physical and Natural Sciences

Internal code 10592808

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Master                    |
|---------------------------|-------------|-----------------------|---------------------------|
| CREDIT POINTS             | 6           | LIMITED ATTENDANCE    | No                        |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NeuroscienceNeuroscie nce |
| PERIOD                    | II semester | DURATION              | 48 h                      |

#### **DESCRIPTION:**

Study the physiological properties of agents acting within the central nervous system

| PREREQUISITES          | Basic Knowledge of Neurophysiology, Biochemistry  |
|------------------------|---|
| WEBSITE                | http://bbcd.bio.uniroma1.it/bbcd/en   |
| CONTACT<br>INFORMATION | aldo.badiani@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









TITLE: Molecular dynamics in plant-microbe interactions: the study of plant-microbe interactions to develop biotechnological approaches for crop improvement

Faculty of Faculty of Mathematics, Physical and Natural Sciences

Internal code

10600071

| LANGUAGE(S)               | English                         | LEVEL OF STUDY           | Master |
|---------------------------|---------------------------------|--------------------------|--------|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE       | No     |
| THEMATIC CIVIS<br>AREA(S) | Climate, Environment,<br>Energy | OTHER DOMAIN OF<br>STUDY |        |
| PERIOD                    | II semester                     | DURATION                 | 48 h   |

#### **DESCRIPTION:**

Study of the molecular, cellular and evolutionary aspects of plant immunity and the analogies and differences with the animal innate immune system

| PREREQUISITES          | Basic Knowledge of cellular and system biology  |
|------------------------|---|
| WEBSITE                | http://bbcd.bio.uniroma1.it/bbcd/en   |
| CONTACT<br>INFORMATION | giulia.delorenzo@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Psychobiology with elements of psychopharmacology

## Faculty of Mathematics, Physical and Natural Sciences

Internal code

10592805

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Master                    |
|---------------------------|-------------|-----------------------|---------------------------|
| CREDIT POINTS             | 6           | LIMITED ATTENDANCE    | No                        |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NeuroscienceNeuroscie nce |
| PERIOD                    | II semester | DURATION              | 52 h                      |

#### **DESCRIPTION:**

Study and understanding the relationship between the nervous system and behavior, from reflexes to cortical functions.

| PREREQUISITES          | Basic Knowledge of cellular and system biology  |
|------------------------|---|
| WEBSITE                | http://bbcd.bio.uniroma1.it/bbcd/en   |
| CONTACT<br>INFORMATION | andrea.mele@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Internal Medicine and General Surgery

### Faculty of Medicine/Internal Medicine

Internal code

1055854

| LANGUAGE(S)               | English        | LEVEL OF STUDY        | Master           |
|---------------------------|----------------|-----------------------|------------------|
| CREDIT POINTS             | 1              | LIMITED ATTENDANCE    | No               |
| THEMATIC CIVIS<br>AREA(S) | Health         | OTHER DOMAIN OF STUDY |                  |
| PERIOD                    | First semester | DURATION              | 12 hours/9 weeks |

#### **DESCRIPTION:**

After the course, the student will have completed an introduction to cinical medicine, to physical examination, to medical diagnosis, to the medical record;, to the doctor-patient relationship; to cure and to care: the differences; illness, disease, sickness: the differences. The objective is to guide the student into the world of Clinical Medicine, helping him/her to get familiar with the concepts of health, disease, person, and providing introductory elements of scientific methodology, and introducing the medical glossary, the medical reasoning and the evidence-based and personcentered modern medicine

| PREREQUISITES          | Not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/en/corso/2020/30893/home  |
| CONTACT<br>INFORMATION | maurizio.muscaritoli@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Internal Medicine and General Surgery

## Faculty of Medicine/Internal Medicine

Internal code

1038322

| LANGUAGE(S)               | English         | LEVEL OF STUDY        | Master           |
|---------------------------|-----------------|-----------------------|------------------|
| CREDIT POINTS             | 2               | LIMITED ATTENDANCE    | No               |
| THEMATIC CIVIS<br>AREA(S) | Health          | OTHER DOMAIN OF STUDY |                  |
| PERIOD                    | Second semester | DURATION              | 22 hours/6 weeks |

#### **DESCRIPTION:**

At the end of the course the student should (1) be able to adress complex clinical cases, affected by muliple pathologies, receiving multiple drugs: (2) know the main risks associated with drug polytherapy and be able to check drug interactions, identify subjects at greater risk of adverse events; (3) interpret arterial blood gas analysis and EKG.

| PREREQUISITES          | A basic knowledge of Medicine, Pharmacology and Pathophysiology  |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/en/corso/2020/30893/home   |
| CONTACT<br>INFORMATION | cosimo.durante@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Internal Medicine and General Surgery

# Faculty of Medicine/Internal Medicine

Internal code

N/A

| LANGUAGE(S)               | English         | LEVEL OF STUDY        | Master          |
|---------------------------|-----------------|-----------------------|-----------------|
| CREDIT POINTS             | 0.5             | LIMITED ATTENDANCE    | No              |
| THEMATIC CIVIS<br>AREA(S) | Health          | OTHER DOMAIN OF STUDY |                 |
| PERIOD                    | Second semester | DURATION              | 6 hours/3 weeks |

#### **DESCRIPTION:**

At the end of the course, the student learned notions about technological innovation in general surgery and digestive endoscopy.

| PREREQUISITES          | Not necessary   |
|------------------------|---|
| WEBSITE                |   |
| CONTACT<br>INFORMATION | enrico.fiori@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Theory and Psychodinamic Models

## Faculty of Medicine and Psychology

Internal code

10591764

| LANGUAGE(S)               | English    | LEVEL OF STUDY        | Master                                       |
|---------------------------|------------|-----------------------|--|
| CREDIT POINTS             | 6          | LIMITED ATTENDANCE    | 40   |
| THEMATIC CIVIS<br>AREA(S) | Health     | OTHER DOMAIN OF STUDY | Clinical<br>PsychologyClinical<br>Psychology |
| PERIOD                    | I semester | DURATION              | 60 hours                                     |

#### **DESCRIPTION:**

The course gives a panoramic view of the development of the clinical psychoana-lytic thought from its origins to the current views that integrate the clinical models with empirical research identifying the main psychopathological areas of application of these theories for both clinical assessment and intervention, with a specific attention to psychoanalytic theories of sexual disorders and paraphilic conducts.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip42/  |
| CONTACT<br>INFORMATION | riccardo.williams@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Experimental methods in Social Neuroscience

## Faculty of Medicine and Psychology

Internal code

1055041

| LANGUAGE(S)               | English    | LEVEL OF STUDY           | Master   |
|---------------------------|------------|--------------------------|--|
| CREDIT POINTS             | 6          | LIMITED ATTENDANCE       | 40   |
| THEMATIC CIVIS<br>AREA(S) | Health     | OTHER DOMAIN OF<br>STUDY | Cognitive<br>NeuroscienceCognitive<br>Neuroscience |
| PERIOD                    | I semester | DURATION                 | 48 hours   |

#### **DESCRIPTION:**

This course aims at providing an up-to date overview of the theories and research areas in the field of Social Neuro-science and offering a comprehensive view of the methods used in the field. In particular, it aims to promote an understanding of the social, clinical and technological potentiality of studies concerning social functions in neurotypical individuals, in the typical and atypical development, and in patients with psychiatric problems or with brain lesions

| PREREQUISITES          | Bachelor Degree   |
|------------------------|---|
| WEBSITE                | https://dippsi.psi.uniroma1.it/   |
| CONTACT<br>INFORMATION | matteo.candidi@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Methodology of nursing research & Nursing evidence

## Faculty of Medicine and Psychology

Internal code

1051022

| LANGUAGE(S)               | English    | LEVEL OF STUDY        | Bachelor       |
|---------------------------|------------|-----------------------|----------------|
| CREDIT POINTS             | 2          | LIMITED ATTENDANCE    | 5              |
| THEMATIC CIVIS<br>AREA(S) | Health     | OTHER DOMAIN OF STUDY | NursingNursing |
| PERIOD                    | l semester | DURATION              | 24 hours       |

#### **DESCRIPTION:**

At the end of course the student will be able to know and understand and gain awareness of the usefulness of applying the statistical methodology to research. In particular, the student will be able to understand the components of a research process, research the available evidence in the literature, critically analyze a research article, Use evidence to make care decisions, describe and document the data.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip_dmcm/   |
| CONTACT<br>INFORMATION | marco.dimuzio@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: General pathology

## Faculty of Medicine and Psychology

Internal code

1051088

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor       |
|---------------------------|-------------|-----------------------|----------------|
| CREDIT POINTS             | 2           | LIMITED ATTENDANCE    | 5              |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NursingNursing |
| PERIOD                    | II semester | DURATION              | 24 hours       |

#### **DESCRIPTION:**

At the end of the course the student will be able to know and understand and relate the causes and effects of certain pathologies. In particular, the student will be able to: begin to have basic knowledge on the main human disease, be able to manage and integrate this knowledge with some methodological aspects of laboratory medicine, begin to develop a correct methodology to orientate in this field

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip_dmcm/   |
| CONTACT<br>INFORMATION | vincenzo.visco1@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: General pathophysiology

## Faculty of Medicine and Psychology

Internal code

1051088

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor       |
|---------------------------|-------------|-----------------------|----------------|
| CREDIT POINTS             | 1           | LIMITED ATTENDANCE    | 5              |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NursingNursing |
| PERIOD                    | II semester | DURATION              | 12 hours       |

#### **DESCRIPTION:**

At the end of the course the student will be able to know and understand and relate the causes and effects of certain pathologies. In particular, the student will be able to: begin to have basic knowledge on the main human disease, be able to manage and integrate this knowledge with some methodological aspects of laboratory medicine, begin to develop a correct methodology to orientate in this field

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip_dmcm/   |
| CONTACT<br>INFORMATION | vincenzo.visco1@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Clinical aspects of paraphilias and of the deviance

## Faculty of Medicine and Psychology

Internal code 10591767

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Master                                       |
|---------------------------|-------------|-----------------------|--|
| CREDIT POINTS             | 6           | LIMITED ATTENDANCE    | 40   |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | Clinical<br>PsychologyClinical<br>Psychology |
| PERIOD                    | II semester | DURATION              | 48 hours                                     |

#### **DESCRIPTION:**

The objectives of this course aim to give a global overview of the field of sexual deviance. In particular, psycho-social criteria will be used for the definition and classification of unusual sexual behaviors, paraphilic behaviors and interests, up to the diagnosis of paraphilic disorders. Both evaluation and therapeutic aspects will be addressed.

| PREREQUISITES          | No  |
|------------------------|---|
| WEBSITE                | https://web.uniroma1.it/dip42/  |
| CONTACT<br>INFORMATION | guido.giovanardi@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Cognitive Neuroimaging

## Faculty of Medicine and Psychology

Internal code

1045031

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Master   |
|---------------------------|-------------|-----------------------|--|
| CREDIT POINTS             | 6           | LIMITED ATTENDANCE    | 40   |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | Cognitive<br>NeuroscienceCognitive<br>Neuroscience |
| PERIOD                    | II semester | DURATION              | 48 hours   |

#### **DESCRIPTION:**

The course aims at providing a solid background on the main techniques used to image the human brain in vivo, and of their application in the cognitive neuroscientific field. Students will be provided a critical view of the validity and the limits of knowledge on the human mind derived by the application of such methods; a series of conceptual tools to personally and critically evaluate results obtained by research in the field of cognitive neuroimaging.

| PREREQUISITES          | Bachelor Degree  |
|------------------------|--|
| WEBSITE                | https://dippsi.psi.uniroma1.it/  |
| CONTACT<br>INFORMATION | gaspare.galati@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Perceptual and cognitive processing

## Faculty of Medicine and Psychology

Internal code

1055054

| LANGUAGE(S)               | English     | LEVEL OF STUDY           | Master   |
|---------------------------|-------------|--------------------------|--|
| CREDIT POINTS             | 6           | LIMITED ATTENDANCE       | 40   |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF<br>STUDY | Cognitive<br>NeuroscienceCognitive<br>Neuroscience |
| PERIOD                    | II semester | DURATION                 | 48 hours   |

#### **DESCRIPTION:**

The course aims to provide basic methodological and theorical information on perceptual and cognitive functioning, learning and development. The interpretability of behavioural measures and their limits, and the nature of the probabilistic behaviour of decision-making are discussed. The course expands on the nature of the information processing stages in perception and cognition. Prac-tical and theorical competences in psychophysics and cognitive science are provided, as well as knowledge of the main computational models of the mind. These concepts and tools are presented in the context of understanding and assessing both adults and developing cognitive abilities

| PREREQUISITES          | Bachelor Degree   |
|------------------------|---|
| WEBSITE                | https://dippsi.psi.uniroma1.it/   |
| CONTACT<br>INFORMATION | marialuisa.martelli@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Clinical pathology

## Faculty of Medicine and Psychology

Internal code

1051088

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor       |
|---------------------------|-------------|-----------------------|----------------|
| CREDIT POINTS             | 1           | LIMITED ATTENDANCE    | 5              |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NursingNursing |
| PERIOD                    | II semester | DURATION              | 12 hours       |

#### **DESCRIPTION:**

At the end of the course the student will be able to know and understand the role of the immune system in the pathophysiological mechanisms of the main organs and systems. In particular, the student will be able to know and understand the diagnostic, prognostic and therapeutic role of the immune system and of the diseases due to its dysregulation and to understand the clinical significance of some laboratory requests

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_dmcm/  |
| CONTACT<br>INFORMATION | enrico.giarnieri@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Clinical nursing in pediatric area

## Faculty of Medicine and Psychology

Internal code

1049587

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor       |
|---------------------------|-------------|-----------------------|----------------|
| CREDIT POINTS             | 2           | LIMITED ATTENDANCE    | 5              |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY | NursingNursing |
| PERIOD                    | II semester | DURATION              | 24 hours       |

#### **DESCRIPTION:**

At the end of the course the student will be able to know and understand the therapeutic and care processes in the Child Mental Area. In particular, the student will be able to know and understand the specific training objectives of the training of professionals in the field of nursing discipline concerning the assistance of pediatric patients.

| PREREQUISITES          | No   |
|------------------------|--|
| WEBSITE                | https://web.uniroma1.it/dip_dmcm/  |
| CONTACT<br>INFORMATION | valentina.biagioli@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE:** Diseases of the Nervous System

## Faculty of Medicine and Surgery

Internal code 1038303

| LANGUAGE(S)               | English    | LEVEL OF STUDY        | Bachelor |
|---------------------------|------------|-----------------------|----------|
| CREDIT POINTS             | 5          | LIMITED ATTENDANCE    | no       |
| THEMATIC CIVIS<br>AREA(S) | Health     | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | I semester | DURATION              | 20 hours |

#### **DESCRIPTION:**

Motor system and sensory system, cranial nerves, emg/eng/ep and eeg, neuroimaging, movement disorders, coma and disorders of consciousness, epilepsy and sleep disorders, brain tumors, neuromuscular disorders, cognitive functions and dementia, stroke, liquor, multiple sclerosis, meningitis and encephalitis, traumatic brain injury and hydrocephalus, neurosurgery of the spinal cord.

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://elearning.uniroma1.it/enrol/index.php?id=6645   |
| CONTACT<br>INFORMATION | alfredo.berardelli@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Applied pathology III - Diseases of the digestive system, endocrine system and metabolism

### Faculty of Medicine and Surgery

Internal code 1038303

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor |
|---------------------------|-------------|-----------------------|----------|
| CREDIT POINTS             | 7           | LIMITED ATTENDANCE    | No       |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | II semester | DURATION              | 56       |

#### **DESCRIPTION:**

At the end of the teaching program the student will be able to Integrate the etiological and pathophysiological mechanisms of the diseases of the digestive tract with the clinical presentation. Analyse symptoms, signs, and investigations in orderly diagnostic algorithms. Comprehend the differences, similarities, and interplay between functional and organic gastrointestinal diseases. Comprehend the reciprocal interaction between environment, psychological status, and gastrointestinal function and diseases. Deal with patients' suffering for chronic gastrointestinal diseases. At the end of the teaching program the student will be able to integrate the etiological and pathophysiological mechanisms of pancreatic diseases with their clinical presentation Integrate the etiological and pathophysiological mechanisms of biliary tract diseases with their clinical presentation, analyse symptoms, signs, investigations and natural history in acute and chronic hepatitis with mentions on interventions, describe the etiology and pathophysiological mechanisms of liver cirrhosis and its complications, with indications on diagnostic algorithms, prevention and therapies, describe the diagnostic algorithms of liver masses with indications on the staging/treatment strategies for patients with hepatocellular carcinoma and cholangiocarcinoma. Knowledge (Gastroenterology): Gastroduodenal Diseases

Helicobacter pylori infection, Acute and Chronic gastritis and gastropathies, Peptic ulcer, Gastric tumors

**Intestinal Diseases** 

Maldigestion and malabsorptionm, Celiac Disease, Inflammatory Bowel Diseases, Diverticular Disease, Rectocolonic tumors

**Functional Gastrointestinal Diseases** 

Dyspepsia, Irritable Bowel Syndrome, Constipation, Diarrhea

**Anorectal Diseases** 

Fecal Incontinence









Acute and chronic pancreatitis. Pancreatic cancer

Acute and chronic hepatitis

Liver cirrhosis and its complications

Non malignant biliary tract diseases

Hepatocellular carcinoma and other liver masses

Liver transplantation in the adult recipient

Emergencies in gastroenterology: digestive bleeding and intestinal occlusion

| PREREQUISITES          | not necessary  |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home   |
| CONTACT<br>INFORMATION | flaminia.ferri@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: Applied pathology III - Diseases of the digestive system, endocrine system and metabolism

## Faculty of Medicine and Surgery

Internal code 1038303

| LANGUAGE(S)               | English     | LEVEL OF STUDY        | Bachelor |
|---------------------------|-------------|-----------------------|----------|
| CREDIT POINTS             | 5           | LIMITED ATTENDANCE    | No       |
| THEMATIC CIVIS<br>AREA(S) | Health      | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | II semester | DURATION              | 40 hours |

#### **DESCRIPTION:**

Definition and classification of diabetes mellitus, type 1 diabetes, type 2 diabetes and other specific types, chronic complications of diabetes (micro and macroangiopatic) acute complications, metabolic syndrome, obesity and thinness, dyslipidemia with reference, especially, to the patient with diabetes. Pathophysiology, pathogenesis, clinical presentation, differential diagnosis, therapy of endocrinological diseases of diabetological interest.

| PREREQUISITES          | not necessary   |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home  |
| CONTACT<br>INFORMATION | antonio.siena@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE:** Emergency Medicine and Surgery

## Faculty of Medicine and Surgery "F" International Medical School

Internal code

1038306

| LANGUAGE(S)               | English         | LEVEL OF STUDY        | University Degree |
|---------------------------|-----------------|-----------------------|-------------------|
| CREDIT POINTS             | 10              | LIMITED ATTENDANCE    | no                |
| THEMATIC CIVIS<br>AREA(S) | Medicine        | OTHER DOMAIN OF STUDY |                   |
| PERIOD                    | Second semester | DURATION              | 40                |

#### **DESCRIPTION:**

The course aims to provide students with the theoretical and practical tools for managing the main medical emergencies (acute respiratory failure, acute myocardial ischemia, acute neurological syndromes, cardiovascular and respiratory assistance), and surgical emergencies (management of polytrauma, abdominal pain, major non-traumatic abdominal surgical emergencies), on the basis of the main International Guidelines, in order to favor their application and shared management throughout all European Nations

| PREREQUISITES          | basic knowledges of physiology, pathophysiology, pharmacology and semeiotics  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home  |
| CONTACT<br>INFORMATION | luigi.petramala@uniroma1.it; claudio.letizia@uniroma1.it; andrea.mingoli@uniroma1.it  |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: DISEASES OF THE SENSORY ORGANS

## Faculty of Medicine and Dentistry and Pharmacy and Medicine

Internal code

1038299

| LANGUAGE(S)               | English | LEVEL OF STUDY        | Students of Fifth year |
|---------------------------|---------|-----------------------|------------------------|
| CREDIT POINTS             | 8       | LIMITED ATTENDANCE    |                        |
| THEMATIC CIVIS<br>AREA(S) | Health  | OTHER DOMAIN OF STUDY |                        |
| PERIOD                    |         | DURATION              |                        |

#### **DESCRIPTION:**

The main objective of the Course of the diseases of the sensory organs is to train doctors and to implement the knowledge in ORL, visual apparatus, Maxillofacial Surgery and Oral Diseases

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                |  |
| CONTACT<br>INFORMATION |  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Anatomy II

## Faculty of Pharmacy and Medicine/Medicine

*Internal code* 1037601

| LANGUAGE(S)               | English        | LEVEL OF STUDY        | Master              |
|---------------------------|----------------|-----------------------|---------------------|
| CREDIT POINTS             | 7              | LIMITED ATTENDANCE    | YES                 |
| THEMATIC CIVIS<br>AREA(S) | Health         | OTHER DOMAIN OF STUDY |                     |
| PERIOD                    | first semester | DURATION              | 12 weeks - 48 hours |

#### **DESCRIPTION:**

Learners who successfully achieve this module will acquire knowledge of the structural organization and functions of the human body and their main anatomical and clinical applications at a macroscopic, microscopic and ultrastructural level. Main skills are: to identify macroscopic anatomical samples; to recognize the structure of the organs by light microscopy.

| PREREQUISITES          | Knowledge of the main cytologic and histologic characteristics of the human body; knowledge of human embryology; knowledge of the anatomy of the musculoskeletal system and of the heart.                       |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home  |
| CONTACT<br>INFORMATION | stafania.nottola@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









### **TITLE: Paediatrics**

#### Faculty of Pharmacy and Medicine/Medicine

Internal code

1038831

| LANGUAGE(S)               | English        | LEVEL OF STUDY        | Master   |
|---------------------------|----------------|-----------------------|----------|
| CREDIT POINTS             | 6              | LIMITED ATTENDANCE    | YES      |
| THEMATIC CIVIS<br>AREA(S) | Health         | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | First semester | DURATION              | 72 hours |

#### **DESCRIPTION:**

Main teaching objectives: Learning physiology, pathology, clinical and laboratory approach, therapy related to growing individuals, specific issues of preventive pediatrics, pediatric diseases from neonatal age through adolescence. a) Normal neurological and mental development of children (neuromotor development, language and communication development, affective development)

- b) Epidemiology and clinical presentation of psychiatric disorders in children and adolescents
- c) Developmental disorders: definition, epidemiology and nosography (autistic spectrum disorders, intellective disability, learning disorders)
- d) Nosography and etiology of neurological disorders in children (semiology of neurological disorders emerging during the first 3 years of life; primary and acquired neurological conditions during childhood and adolescence)
- e) Presenting symptoms and diagnostic work-up in neurological and psychiatric disorders in children and adolescents

| PREREQUISITES          | A basic knowledge of medical pathology and pharmacology is required.  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home  |
| CONTACT<br>INFORMATION | raffaella.nenna@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Immunology and Immunopathology

## Faculty of Pharmacy and Medicine/Medicine

Internal code

1038231

| LANGUAGE(S)               | English        | LEVEL OF STUDY        | Master   |
|---------------------------|----------------|-----------------------|----------|
| CREDIT POINTS             | 8              | LIMITED ATTENDANCE    | YES      |
| THEMATIC CIVIS<br>AREA(S) | Health         | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | First semester | DURATION              | 96 hours |

#### **DESCRIPTION:**

#### Main teaching objectives:

To understand the molecular and cellular basis of the immune response. To understand the fundamental mechanisms responsible for protection and for tissue damage, and to comprehend their specific role in the resistance against pathogens, the immune surveillance against tumors, and immune-mediated diseases. To be able to describe the main events and mechanisms that define the development of protective and pathological immune responses. To understand how research activity contributes to the evolution of knowledge in the immunology field.

| PREREQUISITES          | Students need to possess the knowledge of microbiology, biochemistry, genetics and cell biology, physiology, and anatomy.                          |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home   |
| CONTACT<br>INFORMATION | gabriella.palmieri@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# **TITLE**: Nanotechnologies

# Faculty of Farmacia e Medicina, SMFN

*Internal code* 10598575

| LANGUAGE(S)               | English                              | LEVEL OF STUDY        | Bachelor |
|---------------------------|--------------------------------------|-----------------------|----------|
| CREDIT POINTS             | 6                                    | LIMITED ATTENDANCE    |          |
| THEMATIC CIVIS<br>AREA(S) | Health                               | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | first semester (October-<br>January) | DURATION              | 48 hours |

#### **DESCRIPTION:**

Nanothechnology applications, drug delivery and targeting strategies

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/en/corso/2021/31179/home   |
| CONTACT<br>INFORMATION | Carlotta Marianecci and Paola Baiocco  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: General Surgery I

# Faculty of Pharmacy and Medicine/Medicine

Internal code

10596621 (partial)

| LANGUAGE(S)               | English | LEVEL OF STUDY        | Master |
|---------------------------|---------|-----------------------|--------|
| CREDIT POINTS             | 2       | LIMITED ATTENDANCE    | Yes    |
| THEMATIC CIVIS<br>AREA(S) | Health  | OTHER DOMAIN OF STUDY |        |
| PERIOD                    | second  | DURATION              | 24     |

#### **DESCRIPTION:**

General surgery in the integrated approach to clinical medicine, clinical oncology and radiotherapy.

| PREREQUISITES          | none  |
|------------------------|---|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home  |
| CONTACT<br>INFORMATION | giuseppe.nigri@uniroma1.it  |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: Anatomy III

## Faculty of Pharmacy and Medicine/Medicine

Internal code 1037601

| LANGUAGE(S)            | English                         | LEVEL OF STUDY        | Master   |
|------------------------|---------------------------------|-----------------------|----------|
| CREDIT POINTS          | 7                               | LIMITED ATTENDANCE    | YES      |
| THEMATIC CIVIS AREA(S) | Health                          | OTHER DOMAIN OF STUDY |          |
| PERIOD                 | Second semester<br>(March-June) | DURATION              | 82 hours |

#### **DESCRIPTION:**

- Neuroanatomy: Overview of the Central Nervous System. Spinal cord. Brain stem. Cerebellum. Diencephalon. Basal ganglia. Cerebral hemisphere. Ventricular system, subarachnoid spaces and meninges. Motor pathways. Pathways of the general and the specific sensibility.
- Peripheral nervous system: Generalities. Spinal nerves. Plexuses. Cranial nerves. Organization of the Autonomic Nervous System.
- Visual apparatus: Orbit and accessory visual apparatus. Eyeball. Visual Pathway.
- Auditory apparatus: External and middle ear. Internal ear. Pathway of sound reception.
- Endocrine system: Generalities. Hypothalamus and its nuclei. Pituitary gland. Pineal gland. Thyroid and parathyroid glands. Adrenal gland. Endocrine Pancreas. Interstitial glands of testis and ovary

| PREREQUISITES          | Knowledge of the main cytologic and histologic characteristics of the human body; knowledge of human embryology; knowledge of the anatomy of the musculoskeletal system and of the heart; knowledge of the anatomy of splanchnic viscera |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30893/home   |
| CONTACT<br>INFORMATION | eugenio.gaudio@uniroma1.it   |
| REGISTRATION           | Students should write to <a href="mailto:civis_openonlinecourses.ari@uniroma1.it">civis_openonlinecourses.ari@uniroma1.it</a> indicating the name and code of the course and enclosing a transcript of records.                          |









# **TITLE: Pharmaceutical Chemistry**

*Faculty of* Farmacia e Medicina, Ingegneria dell'Informazione, Informatica e Statistica, SMFN, Medicina e Odontoiatria

Internal code

1049264

| LANGUAGE(S)               | English                         | LEVEL OF STUDY        | Bachelor |
|---------------------------|---------------------------------|-----------------------|----------|
| CREDIT POINTS             | 6                               | LIMITED ATTENDANCE    |          |
| THEMATIC CIVIS<br>AREA(S) | Health                          | OTHER DOMAIN OF STUDY |          |
| PERIOD                    | Second semester<br>(March-June) | DURATION              | 72 hours |

#### **DESCRIPTION:**

Drug discovery and development process, drug-target interactions, physicochemical properties related to drug action such as acid-base properties, equilibrium, and stereochemistry,

| PREREQUISITES          |  |
|------------------------|--|
| WEBSITE                | https://corsidilaurea.uniroma1.it/it/corso/2021/30422/home   |
| CONTACT<br>INFORMATION | Giovanna Poce  |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









### TITLE: COMPARATIVE POLITICS

#### Faculty of Political Sciences Sociology Communication

Internal code 1052210

| LANGUAGE(S)               | English                        | LEVEL OF STUDY           | MA |
|---------------------------|--------------------------------|--------------------------|----|
| CREDIT POINTS             | 9                              | LIMITED ATTENDANCE       | no |
| THEMATIC CIVIS<br>AREA(S) | Cities, territory and mobility | OTHER DOMAIN OF<br>STUDY |    |
| PERIOD                    | Second semester                | DURATION                 | 72 |

#### **DESCRIPTION:**

Goals: The main objective of the course is to provide an advanced competence of the political processes. The course will dedicate a specific part to the relationship between systems of expertise and politics, in a comparative key. Knowledge and ability to understand: Students will be able to understand the functioning of different political systems, with particular attention to the functioning of parties, institutions, interest groups and think tanks. Ability to apply knowledge and understanding: The student will be enabled to understand the provision of the various political regimes: democratic, authoritarian, totalitarian. Autonomy of judgment: The student must possess the fundamental skills that allow him / her to analyze, in an autonomous and critical way, a decision making process and the functioning of the institutions. Communication skills: The essential objective is to build specialized communication skills in the field of political science, which facilitate the professionalization of the student's skills. Learning ability: learning skills will be developed and tested on different levels: through interaction with the class and the teacher, experts in the field, construction of reports and presentations in the classroom. Expected results: The goal is to create the first knowledge that can be spent at institutions, parties and interest groups

| PREREQUISITES          | no   |
|------------------------|--|
| WEBSITE                | 1052210 - COMPARATIVE POLITICS   Catalogo dei Corsi di studio (uniroma1.it)  |
| CONTACT<br>INFORMATION | marco.morini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









## TITLE: EUROPEAN UNION LAW AND HUMAN RIGHTS

#### Faculty of Political Sciences Sociology Communication

Internal code 1052211

| LANGUAGE(S)               | English                                    | LEVEL OF STUDY           | MA |
|---------------------------|--|--------------------------|----|
| CREDIT POINTS             | 9  | LIMITED ATTENDANCE       | no |
| THEMATIC CIVIS<br>AREA(S) | Society, cultures and<br>European heritage | OTHER DOMAIN OF<br>STUDY |    |
| PERIOD                    | Second semester                            | DURATION                 | 72 |

#### **DESCRIPTION:**

The course aims at providing students with the knowledge that is necessary to comprehend the structure of the European Union and the functioning of its institutions, scope and effects of the EU legal sources with particular regard to the protection of fundamental rights in the external dimension of the Union's action in the perspective of sustainable development. The course is based on the method of legal analysis of institutions, normative acts and procedures. Students will acquire the skills necessary to read and comprehend EU legal acts and European Court of Justice judgments and opinions, as well as national legislative and judiciary acts. Moreover, they will be able to apply the acquired skills in the context of future legal research as well as in the context of professional activities. The acquired skills will enable students to critically analyze the EU policies and reach conclusions in autonomy on the basis of a rigorous application of the scientific method of legal analysis. The constant involvement of students during classes, including through the possibility to present individual or group researches on specific topics and the participation in discussions will develop the students' communication skills. The course aims at supporting students in developing a proper study method, which will enable them to address, analyze and learn complex matters.

| PREREQUISITES          | no  |
|------------------------|---|
| WEBSITE                | 1052211 - EUROPEAN UNION LAW AND HUMAN RIGHTS  <br>Catalogo dei Corsi di studio (uniroma1.it)   |
| CONTACT<br>INFORMATION | alessandra.mignolli@uniroma1.it   |
| REGISTRATION           | Students should write to <u>civis_openonlinecourses.ari@uniroma1.it</u> indicating the name and code of the course and enclosing a transcript of records. |









## **TITLE: GLOBALIZATION HISTORY**

## Faculty of Political Sciences Sociology Communication

Internal code 1052207

| LANGUAGE(S)               | English                        | LEVEL OF STUDY           | MA |
|---------------------------|--------------------------------|--------------------------|----|
| CREDIT POINTS             | 9                              | LIMITED ATTENDANCE       | no |
| THEMATIC CIVIS<br>AREA(S) | Cities, territory and mobility | OTHER DOMAIN OF<br>STUDY |    |
| PERIOD                    | Second semester                | DURATION                 | 72 |

#### **DESCRIPTION:**

The aim of the course is to provide the basic knowledge for the analysis and understanding of the evolution of the international political system since the 1840s, focusing on colonialism, decolonization, and globalization. Through the study of these topics students will be able to acquire the knowledge and the interpretative skills necessary to understand the main dynamics of history of international relations and the globalization process. The inclusion of on-going audits in the form of short presentations and discussions by the students will also provide the necessary critical elements and a concrete capacity for analysis.

| PREREQUISITES          | no   |
|------------------------|--|
| WEBSITE                | 1052207 - GLOBALIZATION HISTORY   Catalogo dei Corsi di studio (uniroma1.it)   |
| CONTACT<br>INFORMATION | alessandro.vagnini@uniroma1.it   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |









# TITLE: HISTORY OF INTERNATIONAL AND EUROPEAN RELATIONS

## Faculty of Political Sciences Sociology Communication

Internal code 10589486

| LANGUAGE(S)               | English                        | LEVEL OF STUDY           | MA |
|---------------------------|--------------------------------|--------------------------|----|
| CREDIT POINTS             | 9                              | LIMITED ATTENDANCE       | no |
| THEMATIC CIVIS<br>AREA(S) | Cities, territory and mobility | OTHER DOMAIN OF<br>STUDY |    |
| PERIOD                    | Second semester                | DURATION                 | 72 |

#### **DESCRIPTION:**

The objective of the course is to offer adequate knowledge for the analysis and understanding of the evolution of the international system starting from the Paris Peace Conference and the end of the colonial system. Particular attention will be given to the history of the European integration process and to the continental dynamics. Through the study of the topics covered, students will acquire the knowledge and interpretative skills necessary to understand the main dynamics of the history of international relations. The inclusion of verifications in itinere in the form of short presentations and discussions in the classroom by students should also provide the necessary critical elements and a concrete ability to analyze.

| PREREQUISITES          | no   |
|------------------------|--|
| WEBSITE                | 10589486 - HISTORY OF INTERNATIONAL AND EUROPEAN<br>RELATIONS   Catalogo dei Corsi di studio (uniroma1.it)   |
| CONTACT<br>INFORMATION | alessandro.vagnini@uniroma1.   |
| REGISTRATION           | Students should write to civis openonlinecourses.ari@uniroma1.it indicating the name and code of the course and enclosing a transcript of records. |

