Minor in Coastal Development and Sustainable Maritime Tourism

Courses' Catalogue





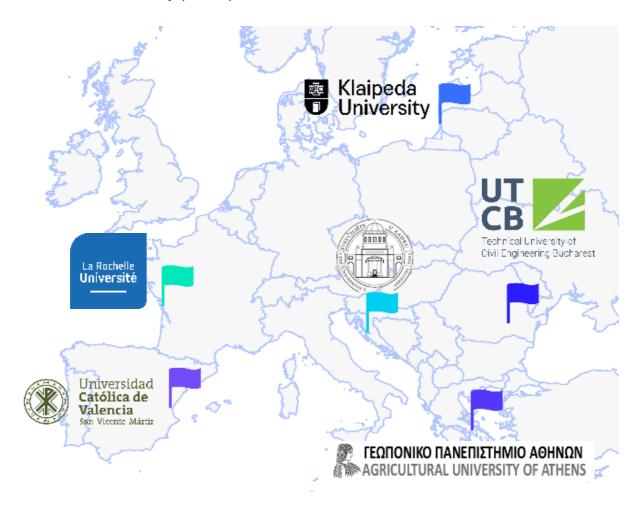


Your university at EU-CONEXUS

The European University for Smart Urban Coastal Sustainability (EU-CONEXUS) is a transnational European higher education and research institution that covers the smart urban sustainable coastal development from a global point of view

EU-CONEXUS is formed of 6 European universities, which are located in Croatia, Greece, France, Lithuania, Romania and Spain:

- University of Zadar (UNIZD),
- Agricultural University of Athens (AUA),
- La Rochelle Université (LRUniv),
- Klaipeda University (KU),
- Technical University of Civil Engineering Bucharest (UTCB),
- La Universidad Católica de Valencia (UCV),
- University of Rostock (UROS),
- Waterford Institute of Technology (WIT),
- Frederick University (FredU).



EU-CONEXUS has chosen a focus on urban and semi-urban coastlines because they are increasingly densely populated areas and very important for trade, aquaculture and fisheries, energy, tourism. At the same time, these coastlines are the most vulnerable areas with regard to the consequences of climate change.

Universities and research institutions have a central role to play in promoting the 'Blue Economy' and 'Blue Growth' and to contribute to the skills and competences of the graduates who can work in a complex and challenging labour market. New approach is needed with regard to the organisation of studies and research therefore, 9 universities joined together to merge their strength and know-how in interdisciplinary short-term and degree programmes and to offer the students to study at international inter-campus European University.

Studying at any of above-mentioned university, you can also study at EU-CONEXUS. Choose international courses, joint short-term and degree programmes, benefit from academic and cultural exchange, and receive not only up-to-market knowledge and competences but also enriched curricula, which will be reflected in your European degree and Diploma Supplement.

EU-CONEXUS OPENS UP OPPORTUNITIES TO INTERNATIONAL CURRICULA, CAREER AND EXPERIENCE



What is Minor and how it is compatible with your Bachelor's study programme

EU-CONEXUS Minor programmes are one of these options to construct flexible, international, multidisciplinary curricula and to receive up-to-date competences that are highly required in the labour market. The 9 EU-CONEXUS universities created international joint Minor programmes, which you can choose studying Bachelor's at your university.

Minor's programme (sometimes called specialisation) is a specific interdisciplinary set of courses in the same or different field of studies, that you can select freely and make up your own set choosing 30 ECTS throughout your studies (for example, one course during one semester parallel to other courses of your chosen study programme).

- Depending on your study programme, you can choose Minor programme as a part or additionally to your study curricula.
- EU-CONEXUS Minor programme consists of **five sectors**; each of them offers several courses that you may choose from.

In order to receive Minor's certificate, during your studies you have to be studied 30 ECTS from:

- minimum 2 different sectors;
- 3 different (one could be yours) EU-CONEXUS universities,
- **5 courses** in total, maximum 2 courses from your home university.

At the end of your Bachelor's studies you will be awarded with Minor's certificate, and all the courses will be included in your Diploma Supplement.

If you do not wish to attend the full Minor's programme, you can always choose only the courses that interest you and enjoy some of the benefits of the EU-CONEXUS experience and to have them listed in your Diploma Supplement¹.

EU-CONEXUS Minor's programme is also an **academic exchange** experience. Choosing any of EU-CONEXUS courses you will be studying with classmates from different universities in Europe and will gain not only knowledge but also learn about different cultures, languages, markets and gain intercultural experience and improve your English language skills. Each EU-CONEXUS course is considered as academic exchange (similar to Erasmus+) and will be included in the Diploma Supplement to prove your international curriculum.

¹ Minor's certificate will be awarded **only** to the students who follow the general requirements of Minor's.

Minor in Coastal Development and Sustainable Maritime Tourism

Coastal regions are areas of major importance for environment and society. Nature and biodiversity must be protected, as well as the rich historical heritage, but in the same time economy and tourism should develop. This makes the coastal regions a territory of complex interactions and raises a hard challenge.

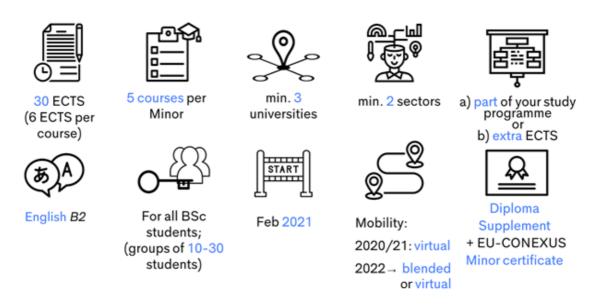
Would you like to be an active actor in addressing this challenge? The EU-CONEXUS Minor in Coastal Development and Sustainable Maritime Tourism provides you competences and professional skills in five key sectors:

- 1. Biodiversity and Coastal Zone Management;
- Environmental Education;
- 3. Human Geography;
- 4. Sustainable Tourism;
- 5. Coastal Engineering.

With a solid theoretical base and through practical activities, you will acquire skills and knowledge that will boost your employability and open professional opportunities in coastal regions in domains like: port and harbour administration, real estate development, governmental agencies, regional and local administration, private and public organisations in the field of environment, tourism and culture, NGOs. You will also acquire an international experience, develop your cultural awareness and intercultural competencies.

Shape your future and become a factor of change in Coastal development!

How to obtain the EU-CONEXUS Minor's certificate



How to choose sectors and courses

- Choose the sectors. Sectors are the areas into which the Minor's programme is divided. The Minor's programme consists of 5 thematic areas (sectors) into which the Minor of Coastal Development and Sustainable Maritime Tourism is focused. You can choose freely the sectors of your interest or the most relevant to your Bachelor's studies. To receive Minor's certificate you must have chosen courses from minimum 2 sectors by the end of your Bachelor's studies.
- Choose the topic. Topic is a field of study that could be comprised by 1 (then the title matches with the title of the course) or more courses with similar or compatible contents. Each sector consists of 3 topics, 15 topics in total. Number of topics you choose has no effect to recieve Minor's certificate.
- Choose the courses. Course refers to a series of lectures, discussions, or other lectures in a particular subject. Course lasts one academic term and is measured in European credits (ECTS). All EU-CONEXUS Minor's courses consist of 6 ECTS and are taught in *English*. You can choose 1-2 courses per semester (consult with the coordinator at your university). Pay attention in which semester, by which university the course is offered and read the prerequisites to be eligible to study the course. The course may be taught only virtually where you will be studying with the classmates from 6 different universities, or to include short term academic exchange at the university which offers this course when you can meet all the teachers and classmates in real life (blended) (see Appendix 1). To receive Minor's certificate you must have chosen courses from minimum 3 different universities (one of them could be your university) by the end of your Bachelor's studies.
- Remember: The Minor's courses can be part of your predefined study programme or extra 'optional' courses.
- You can join the Minor's programme starting from any semester. The first intake is spring semester of 2020/2021. Just note, if you take 1 course per semester, you will need 5 semesters to gather required 30 ECTS of the Minor's programme. Sign up NOW!

Biodiversity-and-Coastal-Zone-Ma	Sector
1. Hydrobiology-Planktology (AUA)¤	
2. Coastal Management p	Topic
2.1. Protected Areas and Recovery of Species (UCV)	
2.2. Coastal Zone Management (KU)	Courses

How to apply

Minor courses can be offered by your home university or any other EU-CONEXUS university. All you need to do is to choose the courses and fill in the application at your home university.

Please check your university's website or contact Minor Officer at you university for more details. One thing we can assure: the procedure is simple, and paperwork is minimal, while Minor Officer will always consult and help you with everything.

Contacts of Minors' officers

University	Name	Surname	E-mail address
UCV	Malgorzata	Musinska	malgorzata.musinska@ucv.es
AUA	Olga	Ntantali	ntolga@uth.gr
LRUniv	Stephanie	Chiron	stephanie.chiron@univ-lr.fr
UTCB	Ramona	Diac	ramona.diac@utcb.ro
KU	Ingrida	Rukavice	ingrida.rukavice@ku.lt
UNIZD	Ljerka	Morović	lmorovic@unizd.hr
UROS	Mawuena	Martens	mawuena.martens@uni-rostock.de
WIT	Nabla	Kennedy	nkennedy@wit.ie
FU	Varnavas	Mytilineos	ad.mv@frederick.ac.cy

Contents

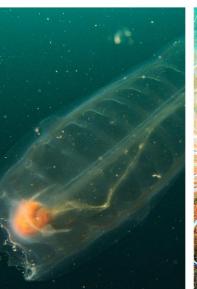
Sectors and courses	8
Biodiversity and Coastal Zone Management Sector	10
Environmental Education Sector	17
Human Geography Sector	24
Sustainable Tourism Sector	31
Coastal Engineering Sector	39
Summary : Courses in 2022-23 academic year	44

Sectors and courses
Biodiversity and Coastal Zone Management
1. Biodiversity
1.1 Hydrobiology-Planktology (AUA)
1.2 Agrobiodiversity and Ecosystem Services
2. Coastal Management
2.1. Protected Areas and Recovery of Species (UCV)
2.2. Coastal Zone Management (KU)
3. GIS
3.1. Geographic Information Systems and Remote Sensing (UTCB)
3.2. Geographical Information System and Remote Sensing (KU)
Environmental Education
4. Environmental Education
4.1. Environmental Education (UCV)
4.2. Pollution/Depollution (water, air, soil) (UTCB)
5. Ecological Psychology (UNIZD)
6. Effects of Climate Change
6.1. Effects of Climate Change (UTCB)
6.2. Effects of Climate Change on Coastal Areas (AUA)
Human Geography
7. Culture and Heritage
7.1. Cultural Geography (UNIZD)
7.2. Maritime Cultural Heritage (KU)
8. Maritime Geography
8.1. Coastal Geography (practices, stakeholders, conflicts, governance) (LRUniv)
8.2. Social Economic Geography of Coastlands (KU)
Sustainable Tourism
10.Tourism and Sustainability
10.1. Sustainable Tourism Development (KU)
10.2. Sustainable Tourism Development (AUA)
10.3. Tourism Facing Digital Transition (LRUniv)
10.4. Coastal Tourism Facing Social and Environmental Transition (LRUniv)
10.5 Entrepreneurship and Innovation around Sustainable Tourism (LRUniv)
11. Spatial Planning of Maritime Tourism (KU)
12. Performant Built Facilities for Sustainable Tourism (UTCB)
Coastal Engineering

13. Environmental Impact Assessment (UCV)
14. Sustainable Built Environment (UTCB)

15. Natural Hazards in Coastal Regions (UTCB)











Biodiversity and Coastal Zone Management Sector

Coastal zones are areas of great economic, social and ecological importance. These zones are under increasing pressure from anthropogenic impacts since the majority of the world's population inhabit them, and they are used extensively and increasingly for a large number of activities. Therefore, public institutions and companies are looking for experts in protection, conservation, rehabilitation and management of these areas, including their biological diversity.

The academic offer of the Biodiversity and Coastal Zone Management sector will, therefore, provide you knowledge in marine biodiversity and in coastal zone management to acquire the necessary expertise to manage coastal zones, to balance environmental, economic, and human activities, and to ensure and conserve the range of benefits that these systems provide.

To learn more and gain the competences in Biodiversity and Coastal Zone Management we recommend to choose from the following courses:

Sector	Topic	Course	Semester	ECTS	University
Biodiversity and Coastal Zone Management	1. Biodiversity	1.1. Hydrobiology- Planktology	Autumn	6	AUA
	,	1.2 Agrobiodiversity and Ecosystem Services	, Chrina l	6	UROS
	2. Coastal	2.1. Protected Areas and Recovery of Species	Autumn	6	UCV
	Management	2.2. Coastal Zone Management	Zone Autumn 6	KU	
	3. GIS	3.1. Geographic Information Systems and Remote Sensing	Spring	6	UTCB
		3.2. Geographical Information System and Remote Sensing	Spring	6	KU

Employability

The competences are highly required in these economic sectors and activities: coastal resources management, public administration, environment consultancies, environmental protection, and regional development.

Topic: Biodiversity		
Course: Hydrobiology-Planktology		
University: Agricultural University of Athens		
6 ECTS	Language:	English

The course content includes the following thematic areas: 1) Introduction to the Marine Environment (Properties of Water, Basic Oceanography, Ecological Principles, Larvae and Larval Ecology, Comparison of Terrestrial and Marine Ecosystems, Division of the Marine Environment), 2) Plankton and Plankton Communities (Phytoplankton, Zooplankton, Floatation Mechanisms, Primary Production, Factors Affecting Primary Productivity, The Ocean Ecosystem: The Classic Model and the Microbial Loop), 3) Oceanic Nekton (Composition of the Oceanic Nekton, Environmental Conditions, Adaptations of Oceanic Nekton, Ecology of Nekton), 4) Deep-Sea Biology (Zonation, Sampling the Deep Sea, Environmental Characteristics, Adaptations of Deep-Sea Organisms), 5) Benthic communities and habitats, 6) Coral Reefs, 7) Mangrove Forests, 8) Symbiotic Relationships. During the practical part of the Course, students will observe plankton samples under stereoscope or microscope and they will perform analyses of water nutrients.

Course activities:

Visit to a oceanographic vessel and training to water and plankton sampling.

Soft skills:

Analytical skills, research, group/team working, presentation, written communication.

Prerequisites:

Basic concepts in biology (animal classification and main characteristics).

More information:

Department of Animal Science: http://www.european.aua.gr/?page_id=780

Topic: Biodiversity		
Course: Agrobiodiversity and Ecosystem Services	S	
University: University of Rostock		
6 ECTS	Language:	English

The course provides knowledge on genetic variability of plants, animals and microorganisms that are directly or indirectly important in agriculture as well as impacts of agricultural activities to adjacent ecosystems with the focus on coastal zones. The course also considers ecosystems services in rural areas and discusses impacts of planetary boundaries on agricultural systems.

Students will become familiar with the following subtopics:

- Natural resources and Planetary boundaries
- Ecosystem services comparison of natural and agricultural systems
- Management of fragile agroecosystems
- **Environmental monitoring**
- Special features of agrobiodiversity
- Mixed cropping systems
- Agroforestry and Paludi culture
- Microbial diversity and Plant associated microorganisms

Course activities:

Lectures on theoretical backgrounds of the sub-topics, project-based teaching and project work in small groups (2 to 3 students), presentation of project outcomes.

Soft skills:

Scientific & critical thinking, team-work skill, presentation skill, problem-solving skill, international communication

Prerequisites:

Knowledge in ecology or agronomy would be useful, but are not prerequisites for the student to successfully complete the course

Topic: Coastal Management					
Course: Protected Areas and Recovery of Species					
University: Universidad Católica de Valencia					
6 ECTS	Language:	English			

This course will define what Natural Protected Areas (ENP) are, the tools for the conservation of these areas in the international, national and regional context and the management, panning and public uses of these ENPs. The student will learn the requirements for an area to be classified as a marine protected area and the main international figures of protection of these areas. Furthermore, the student will learn the general tools for the recovery of threatened species and the functioning of the species recovery centres. Finally, the student will be able to assess the degree of threat to habitats and species and its consequences on natural and socio-economic systems.

Course activities:

Visits to

- the Penyal d'Ifac Natural Park and the Research Institute of Environment and Marine Science of the Catholic University of Valencia (IMEDMAR). Calpe (Alicante),
- the Natura 2000 Network of Montgó-Cabo de San Antonio Natural Marine Reserve. Jávea (Alicante),
- the Natural Park of l'Albufera (Valencia) and the recovery centre of the Comunidad Valenciana (El Saler),
- the Turia Ripícola Forest Natural Park,
- the Natural Sciences Museum Technical,
- the Oceanografic.

Soft skills:

Conflict management, project management, group/team working.

Prerequisites:

None.

More information:

https://www.ucv.es/oferta-academica/grados/grado-en-ciencias-del-mar/seccion/guiasdocentes/fichero/ficheroguiadocenteingles/id/270206/plan/2008/mod/2016

Topic: Coastal Management				
Course: Coastal Zone Management				
University: Klaipeda University				
6 ECTS	Language:	English		
What will you learn:				
The module provides background information on Coastal and Marine Management. The information is focussed on Europe and the Baltic Sea. The aim is to provide up-to-date information on environmental problems, pressures, policies and management. For this purpose, mainly official documents provided by high-ranking international organisations are utilised. The following topics are covered: 1. Coastal Zones & Seas; 2. Coastal Management (ICZM); 3. ICZM Cycle; 4. ICZM Tools & Approaches; 5. EU Maritime Policy; 6. EU Environmental Policy; 7. The Baltic Sea (BS).				
Course activities:				
International group project, site/field visit.				
Soft skills:				
Analytical skills, group/team working, problem so conflict management.	lving, presentation,	international communication,		
Prerequisites:				
None.				
More information:				
The link is not available yet.				

Topic: GIS					
Course: Geographic Information Systems and Remote Sensing					
University: Technical University of Civil Engineering Bucharest					
6 ECTS	Language:	English			

This is an applications-oriented course, which will cover an introduction to GIS and remote sensing as tools to address better engineering, environmental and sustainability issues in real world applications. The course will take you through the main stages of a geospatial problem solving cycle: from the identification of a geospatial problem, via the exploration and analysis of map data and RS images, to the generation of relevant geospatial information. Throughout the course, you will develop hands-on experience in using selected software tools - ArcGIS Online, ArcGIS Pro with Image Analyst and RS dedicated free software (SNAP) from European Space Agency.

You will study in an international and multicultural online environment; you will become acquainted with ready-to-use GIS and earth observation tools and methods. Through the application of this knowledge and skills, you will be able to leverage informed decision making within many organisations.

Course activities:

The course is given in the form of lectures and exercises, which may be done in small groups working in the interactive ArcGIS Online organisation of UTCB. (https://geodezie-2d-<u>3d.maps.arcgis.com/home/index.html</u>). You will receive free ESRI licenses during the course.

Soft skills:

Analytical skills, group/team working, problem solving, innovation/creativity.

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainablemaritime-tourism/geographic-information-systems-and-remote-sensing

Topic: GIS		
Course: Geographic Information Syste	ms and Remote Sensing	
University: Klaipeda University		
6 ECTS	Language:	English
What will you learn:		·
The course consists of introduction and	d three main parts. Introdu	ction rises common marine and
anastal anvivanmantal medalama and	anatial mathada haw ta aa	lua tham, ahaut ranatitian inta

coastal environmental problems and spatial methods how to solve them; short repetition into practice with GIS and remote sensing. The first part of the course deals with spatial environmental data (including remote sensing) search, download and import, selection and transformation for certain tasks. In the second part, spatial analysis and statistics are applied for solving specific tasks. In the third part, interpretation of obtained results comparing to other studies; predictions based on ecological scenarios.

Course activities:

Experts' lectures, individual/group project, consultation with stakeholders.

Soft skills:

Analytical skills, problem solving, practical exercises, presentation.

Prerequisites:

Geographical Information System (GIS), mathematics and statistics.

More information:

The link is not available yet.



Environmental Education Sector

Environmental education connects us to the world around us, teaching us about both natural and built environments. Environmental education raises awareness of issues impacting the environment upon which we all depend, as well as actions we can take to improve and protect it. Students develop critical-thinking, problem-solving and decision-making skills.

The academic offer of the Environmental education sector will provide therefore you with knowledge and understanding of the environment and the environmental challenges, as well as with the necessary skills to identify and help resolve them. Students have the opportunity to reflect on cases that lead to climate change, mitigation and depollution of air, water and soil. They will also get to know, adopt and understand the most relevant scientific and professional terminology and literature in the field of ecological psychology. The sector

guides students to the essentials of environmentally friendly practices that can be applied to several activities of blue economy, such as tourism, airports, etc.

To learn more and gain the competences in Environmental Education we recommend to choose from the following **courses**:

Sector	Topic	Course	Semester	ECTS	University
4. Environmental Education Environmental 5. Ecological Psychology 6. Effects of Climate Change	4.1. Environmental Education	Autumn	6	UCV	
	4.2. Pollution/Depollution (water, air, soil)	Spring	6	UTCB	
		5.1. Ecological Psychology	Spring	6	UNIZD
	6.1. Effects of Climate Change	Spring	6	UTCB	
	Climate Change	6.2. Effects of Climate Change on Coastal Areas	Autumn	6	AUA

Employability

Coastal resources management, Public administration, Environmental and business consultancies, Environmental protection, Regional development, Education (primary, secondary and higher).

Topic: Environmental Education		
Course: Environmental Education		
University: Universidad Católica de Valencia		
6 ECTS	Language:	English

Environmental Education is a process that allows the exploration of environmental issues, to engage in problem solving, and to take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and achieve the skills to make informed and responsible decisions. The course will lead the student to understand the meaning and relevance of Environmental Education, and to know the global environmental situation of today, as well as the current environmental issues. Students will learn the methodologies and resources in Environmental Education and will acquire guidelines and skills to design environmental education activities.

Course activities:

The student will have to develop a Marine Environmental Education Project and apply it at a local level in a natural or urban environment.

Virtual or physical visit to 'Centro de Educación Ambiental de la Comunitat Valenciana (CEACV)'.

Soft skills:

Group/team working, innovation/creativity, ICT skills, project management.

Prerequisites:

None.

More information:

https://www.ucv.es/oferta-academica/grados/grado-en-ciencias-del-mar/seccion/guias-docentes/fichero/ficheroguiadocenteingles/id/270204/plan/2008/mod/2016

Topic: Environmental Education				
Course: Pollution/Depollution (water, air, soil)				
University: Technical University of Civil Engineering Bucharest				
6 ECTS	Language:	English		

Deterioration of the quality of the main environmental factors: water, air, soil and subsoil with direct and indirect impact on the human factor, is one of the major problems facing humanity today.

Conservation, protection of the quality and depollution of environmental factors are among current and future objectives of human society.

Students who will take this course will learn about the transport mechanisms of pollutants in the air, groundwater and subsoil and they will get in touch with the latest techniques, methods, equipment for monitoring the quality of environmental factors, protection and their depollution.

Course activities:

Some lectures will include short movies related to the diffusion and dispersion of pollutants in the main environmental factors: water, air, soil, other lectures will include presentations of some practical methods/techniques for remedying the quality of polluted environmental factors.

Soft skills:

Analytical skills, group/team working, presentation, international communication, innovation/creativity.

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainable-maritime-tourism/pollution-depollution-water-air-soil/

Topic: Ecological Psychology		
Course: Ecological Psychology		
University: University of Zadar		
6 ECTS	Language:	English

The aim is for the student to get to know, adopt and understand the most relevant scientific and professional terminology and literature in the field of ecological psychology, to be acquainted with the methods of ecological psychologists, and to encourage critical reflection on fundamental issues and problems in the same field. Students would be listening to lectures on various themes in the area (e.g. perception and preference of different environments, environmental stress, promoting pro-environmental behaviour, eco-therapy, etc.) and will be given essay and practical assignments related to these themes on a weekly basis.

Course activities:

Besides lectures of experts in the field, the related assignments throughout the course give opportunities for the other stated course activities.

Soft skills:

Analytical skills, problem solving, research, written communication, presentation.

Prerequisites:

Basic knowledge in scientific methodology and statistical procedures.

More information:

https://www.unizd.hr/Portals/0/ms/syllabi/20_21_PSIH_W_Basics%20of%20Ecological%2 0Psychology.pdf?ver=2020-05-20-112339-447

Topic: Effects of Climate Changes			
Course: Effects of Climate Changes			
University: Technical University of Civil Engineering Bucharest			
6 ECTS	Language:	English	

Accentuated desertification, floods, extreme weather events, rising sea and ocean levels are some of the effects of climate changes, to which we are increasingly subjected. In this Course, students will find out what are the main climate changes, what are their causes and impacts on the natural and built environment. The measures needed to prevent and reduce the climate changes effects are also addressed. Students will learn how to assess the effects of climate changes on a built investment and the effects of investment on the environment, and propose concrete measures for protecting the investment and the environment.

Course activities:

Three lectures will be dedicated to a short, practical project to assess the effects of climate change on a new or existing investment (for example, an airport) and its effects on the environment.

Soft skills:

Basic analytical skills, basic problem solving, innovation/creativity, presentation, ICT skills.

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainable-maritime-tourism/effects-of-climate-change/

Topic: Effects of Climate Change

Course: Effects of Climate Change on Coastal Areas

University: Agricultural University of Athens

6 ECTS Language: English

What will you learn:

The course will equip students with a good understanding of the natural and physical dimensions and processes involved in climate change. Effects of climate change on the ocean and coastal areas will be presented and in particular the adverse effects on biodiversity (e.g. coral reefs) and blue growth (e.g. aquaculture). Then it will be demonstrated how climate change impacts on tourism, the international agreements about the mitigation of the phenomenon and the goals and deadlines that need to be reached. The module will also guide students to the essentials of environmentally friendly practices that can be applied to tourism with emphasis on the accommodation and food and beverages sector. Furthermore, major infrastructure works have to be adapted to climate change challenges.

Course activities:

The students will have the opportunity to conduct case studies and observe what they learn through movies and the internet. Foremost the students will have the opportunity to observe success stories of various entrepreneurs and to attend lectures on pollution, prepared by the educational unit of Hellenic Centre of Marine Research.

Soft skills:

Group/team working, research (scientific writing and oral presentation), and ICT skills.

Prerequisites:

None.

More information:

The link is not available yet.



Human Geography Sector

Human geography is an important field of geography. Studies of society and its activities related to the application of the spatial, structural and dynamic approach, which implies on the application of interdisciplinary approach within social sciences and humanities, it enables the elaboration of evidence-based solutions captured by different social, economic and cultural factors in the coastal regions. Theoretical and methodological concepts both facilitate the application of retrospective and retrogressive approaches in the analysis of societal processes and their spatial changes in the coastland, which requires the application of systematic analysis of the coastal regions. Contribution of spatial concepts as the application of territorially related quantitative and qualitative data, territorial analysis of social, economic and cultural structures and their changes in time and space, as well analysis of factors, all these affect scenarios of social, economic and cultural developments. The interdisciplinary approach requires the elaboration of the spatial bond, which is used in the studies of developments of maritime culture, history and geography of socio-economic changes in coastlands.

To learn more and gain the competences in Human Geography we recommend to choose from the following **courses**:

Sector	Topic	Course	Semester	ECTS	University
	7. Culture and	7.1. Cultural Geography	Spring	6	UNIZD
	Heritage	7.2. Maritime Cultural Heritage	Autumn	6	KU
Human Geography	8. Maritime Geography	8.1. Coastal Geography (practices, stakeholders, conflicts, governance)	Autumn	6	LRUniv
	J. G. P.,	8.2. Social Economic Geography of Coastlands	Autumn	6	KU

Employability

Spatial and strategical planners, public administration, specialists of regional development, maritime logistics, analysts of transportation systems, port operators, coastal/water tourism managers, business economy, business management, managers of cultural events.

Topic: Culture and Heritage				
Course: Cultural Geography				
University: University of Zadar				
6 ECTS	Language:	English		
What will you learn:				
This course introduces theories, terms, and contemporary Topics in cultural geography, the academic study of the spatial aspects of human existence. We will explore the complex relationships between people and the worlds they inhabit by examining human migration patterns, population growth trends, economic development strategies, political conflicts, cultural landscapes, and interactions with the environment. Cultural geography is concerned with making sense of people and the places they occupy through analyses of cultural processes, cultural landscapes, and cultural identities. The course introduces culture from a geographical perspective, focusing on how cultures work in place and how they are embedded in everyday life.				
Course activities:				
Soft skills:				
Analytical skills, group/team working, research, written communication, presentation, intercultural skills.				
Prerequisites:				
None.				
More information:				
https://www.unizd.hr/Portals/0/ms/syll	abi/20_21_GEO_undergradua	ate%20Courses.pdf?ver		

=2020-03-09-104546-543

Topic: Culture and Heritage		
Course: Maritime Cultural Heritage		
University: Klaipeda University		
6 ECTS	Language:	English

Over time, a unique maritime cultural landscape has formed in coastal environments. On completion of the course, the knowledge of this kind of heritage, its objects and origin will be acquired. In addition, the understanding of relationships between the man and sea in different historical periods, the knowledge of coastal and underwater heritage as well as the role of nature and human activities in formation of the processes will be gained. The importance of maritime cultural heritage for today's societies will be presented. A particular attention will be given to Baltic maritime cultural heritage; it will be possible to apply the knowledge in various scientific research activities.

Course activities:

Field trips, tours to maritime museum(s).

Soft skills:

Analytical skills, group/team working, problem solving, research, written communication, presentation, international communication, intercultural skills, innovation/creativity, project management, leadership, conflict management, ICT skills, etc.

Prerequisites:

Background in maritime geography/history/tourism; coastal planning/development.

More information:

https://web.liemsis.lt/kuis/md\$mdl.startup

Topic: Maritime Geography		
Course: Coastal Geography		
University: La Rochelle Université		
6 ECTS	Language:	English
What will you learn:		
The course deals with the major types of coastal	environments in the	world. It discusses the main
principles of coastal environments as well as the	ne factors that drive	their evolution. The course
presents the forms and dynamics of coastal dev	elopment and manag	gement, which make society
a full player in their evolution of coastal environm	ents (coastal natura	l hazards, implementation of
developments, protection policies).	·	·
Course activities:		
Experts' lectures.		
Soft skills:		
Analytical skills, group/team working, problem s	solving, research, pre	esentation, international
communication.		
Prerequisites:		
None.		
More information:		
The link is not available yet.		

Topic: Maritime Geography				
Course: Social Economic Geography of Coastlands				
University: Klaipeda University				
6 ECTS Language: English				

The course is designed to introduce socio-economic phenomena and their differences in the coastal zone. It includes a comparison of demographic processes, population change, migration processes, and the distribution of cities and villages. The distribution of economic activities and employment of population in the sectors of the coastal economy are also analysed, the interaction between the city and port management is revealed. Students analyse maps, statistics; compare the socio-economic situation between different coastal areas. Also, a variety of situations that require critical thinking, problem solving, and discussion are adapted.

Course activities:

Interesting project, group project, site/field visit.

Soft skills:

Analytical skills, group/team working, problem solving, presentation, international communication.

Prerequisites:

Introduction to Human Geography, basics of economics, basics in social research methodology. Basic knowledge in Cartography and GIS is a benefit.

More information:

The link is not available yet.



Sustainable Tourism Sector

Sustainable tourism is a long-term, 'smart' tourism strategy. It implies an optimal use of natural resources while preserving ecological processes, natural heritage, and biological diversity. It promotes respect for the social and cultural values of the community and preservation of cultural heritage and traditional values with intercultural understanding and tolerance as well as widespread European values and culture. It includes long-term planning to improve economic opportunities and alleviate poverty while constantly contributing to social opportunities within the community.

In other words, sustainable tourism is an effort to minimise the impact on the environment and local culture, while enabling job creation for local people in the future.

The academic offer of the Sustainable Tourism sector will, therefore, provide you knowledge in basic principles of sustainability and some aspects of the planning of maritime tourism to acquire the necessary expertise to manage sustainable tourism's processes and to balance environmental, economic, cultural and human activities in tourism.

To learn more and gain the competences in Human Geography we recommend to choose

Sector	Topic	Course	Semester	ECTS	University
		10.1. Sustainable Tourism Development	Spring	6	KU
		10.2. Sustainable Tourism Development	Autumn	6	AUA
	10.Tourism and	10.3. Tourism Facing Digital Transition	Spring	6	LRUniv
Sustainable	Sustainability Sustainable Tourism	10.4. Coastal Tourism Facing Social and Environmental Transition	Spring	6	LRUniv
Tourism		10.5. Entrepreneurship and Innovation around Sustainable Tourism	Spring	6	LRUniv
	11. Spatial Planning of Maritime Tourism	11.1. Spatial Planning of Maritime Tourism	Spring	6	KU
	12. Performant Built Facilities for Sustainable Tourism	12.1. Performant Built Facilities for Sustainable Tourism	Spring	6	UTCB

Employability

Expertise in sustainable tourism is required in every economic sector which is related to tourism: public sector (relevant ministries and agencies), local community organisations, all segments of the tourism industry, environmental protection, regional development, architecture and building, transport providers, etc.

Topic: Tourism and Sustainability		
Course: Sustainable Tourism Development		
University: Klaipeda University		
6 ECTS	Language:	English

The course is intended to introduce students with the concepts of sustainable tourism development, its patterns, principles and their practical application in tourism management. During the course, students will gain an understanding about the strengths and challenges of tourism as a tool for sustainable development, key actors in the sustainable tourism, their impact and interaction within each other. Course helps to form a systematic knowledge about the impacts of the tourism industry on destinations and local communities, to understand how sustainable tourism works within different type of tourism sectors and types of tourism.

Course activities:

Students will improve their analytical and creative skills working on a group tasks which are aimed to help to understand the topic better and to trigger professional curiosity.

Soft skills:

Analytical skills, group/team working, problem solving, presentation, innovation/creativity.

Prerequisites:

None.

More information:

The link is not available yet.

This course is part of the Minor in Blue Economy and Growth, too.

Topic: Tourism and Sustainability

Course: Sustainable Tourism Development

University: Agricultural University of Athens

6 ECTS

Language: English

What will you learn:

This course will guide students through the concepts of environmental impact, sustainability and the challenges proposed in the New Economics Paradigm, which can provide tourism examples for development. The module aims at explaining the nature of externalities generated by tourism, the difference between the generation of income and wellbeing, analyse environmental impacts caused by tourism, understand the difference between renewable and non-renewable resources and the treatment of the environment as a sink. The module will provide the basic tools for economic valuation that could be employed for all-inclusive pricing of tourism products, which will also enable full compensation for the environmental impact caused by tourism, particularly for a socially fair pricing of open-access resources. Besides major policy events and summits from which new deadlines for correcting environmentally damaging behaviours, there are various tools available through which unsustainable cases can be remedied or even circumvented (e.g. taxes, permits, ownership, subsidies, laws and controls, corporate social responsibility, special designation, tradable rights, tourism eco-labelling, certification and award schemes, ecotourism approaches etc.).

Course activities:

Presentation of case studies and movies. The student will have the opportunity to reflect on major case studies and observe what he/she learns through movies and the internet.

Soft skills:

Group/team working, research (scientific writing and oral presentation), and ICT skills.

Prerequisites:

None.

More information:

The link is not available yet.

Topic: Tourism and Sustainability			
Course: Tourism Facing Digital Transition			
University: La Rochelle Université			
6 ECTS	Language:	English	
What will you learn:			
The Computer Science Topics of the sustainable tourism will propose an introduction to the core technologies used in the digital tools for tourism (eTourism): - Touristic Information Extraction and Content Formatting. The core idea will be to explain how touristic information could be scrapped and cached in various digital content and format to ease its usability by the other steps. - Named Entities Recognition and Linking. Once data has been captured over the web or specific content, this second part will tend to extract the most important features like the named entities in order to understand which Topic is developed in the content and to retrieve information. - Digital Tracks for Tourism. The rising of the number of different kinds of data that can be used to describe a human trajectory place in the spotlight the semantically rich trajectory. This part will focus on using raw data to describe a semantic trajectory (person's path, sequence of visited places). - Big Data Architecture for Tourism. Finally, the last part will deal with the big data technologies and architectures to be able to process a large amount of content on the one hand, and to be able to retrieve relevant information on the other hand.			
Course activities:			
Experts' lectures.			
Soft skills:			
Analytical skills, group/team working, problem solving, research, presentation, international communication.			
Prerequisites:			
None.			
More information:			

The link is not available yet.

Topic: Tourism and Sustainability				
Course: Coastal Tourism Facing Social and Envi	ronmental Transitior	1		
University: La Rochelle Université				
6 ECTS	Language:	English		
What will you learn:				
These courses deal with the emergence of sustain of sustainable tourism. It also explains sustain coastal societies, its strengths and limitations of	able tourism issues	•		
The first part of the courses is theoretical and the	e second part is base	ed on case studies.		
Course activities:				
Experts' lectures.				
Soft skills:				
Analytical skills, group/team working, probler communication.	n solving, research	, presentation, international		
Prerequisites:				
None.				
More information:				
The link is not available yet.				

Topic: Tourism and Sustainability		
Course: Entrepreneurship and Innovation around	d Sustainable Tourisi	n
University: La Rochelle Université		
6 ECTS	Language:	English
What will you learn:	l	
At the end of this minor, students will have acque project through creativity sessions. Then we will inseparable from entrepreneurship. All of the enwith societal, environmental and sustainable issues.	teach them what inn trepreneurial concep	ovation is and how it is
 Get to know each other - definition of socientrepreneurs Example of innovation & sustainable entremark How to innovate - tools and methods - Business Model Canvas Escape game - Get to know each other - Project Market around sustainable touris 3 days to answer a problematic of a local workshop, brainstorming and formalization presentation in the form of a pitch 	epreneurship campus visit m- partner around susta	ainable tourism. Creativity
Course activities:		
The students will have exchanges with entreprestages of project development through online are to La Rochelle to work together on a project madevelopment. Problem proposed by a local particular control of the students of t	nd distance learning arket on the theme o	courses. They will be invited
Soft skills:		
Analytical skills, group/team working, problem solution/creativity, project management.	solving, research, pro	esentation,
Prerequisites:		

None.

Topic: Spatial Planning of Maritime Tourism				
Course: Spatial Planning of Maritime Tourism				
University: Klaipeda University				
6 ECTS	Language:	English		

The course is designed to study theoretical concepts and practical aspects of maritime tourism, to introduce to different cases and practices in maritime regions. Application of spatial planning concepts and their methods reveal the potential of maritime tourism in different practices on the worldwide scale. Territorial complex analysis will be accomplished using quantitative and qualitative data in different case studies. The methods of spatial analysis of locations, distributions, concentrations, territorial structures, analysis of strategical documents, and application of Geographic information systems will be used. A tentative plan of spatial planning of maritime tourism will be elaborated for each targeted coastal area.

Course activities:

Case study, international group project, interactive seminars, analysis of regional development projects, analysis of strategical planning documents, application of GIS in spatial planning).

Soft skills:

Analytical skills to problem solving, group/team working, research, presentation, international communication spatial planning using GIS.

Prerequisites:

Basics of Tourism, Basics of Economy, Basics of Physical or Social/Economic Geography.

More information:

The link is not available yet.

Topic: Performant Built Facilities for Sustainable Tourism				
Course: Performant Built Facilities for Sustainable Tourism				
University: Technical University of Civil Engineering Bucharest				
6 ECTS	Language:	English		

The course and its applications will tackle topics like: the resistance and durability of the touristic constructions, blending modern and traditional architecture, mainstream vs luxury vs special, European approach of cultural heritage and conservation, retrofitting and renovation of existing buildings, facilities for Eco tourism, thermal comfort, acoustics, lighting, air quality using smart and innovative solutions, low-environmental impact of the facility via low energy consumption systems (including financial analysis. The course will benefit of examples of modern or traditional, group or remote tourism in the Danube Delta, area of extreme biodiversity, designated as an UNESCO World Heritage Site.

Course activities:

Real case study from the Black Sea coast & the Danube Delta.

Soft skills:

Analytical skills, group/team working, problem solving, written communication, presentation, innovation/creativity, project management.

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainable-maritime-tourism/performant-built-facilities-for-sustainable-tourism/



Coastal Engineering Sector

Coastal regions are characterised by a concentration of population and economic activities and they are often of major touristic importance. They have an important environmental impact and are subject to significant natural hazards.

Within this sector, students will gain an overview of the built environment in coastal regions, it's components and their characteristics (civil, industrial, agricultural, hydro-technical constructions), will understand how to address the durability and sustainability and what are the challenges associated to the environmental impact, will learn about the natural hazards affecting the coastal regions (earthquakes, wind, landslides, erosion, etc.). Everything will be addressed concerning the European regulations.

To learn more and gain the competences in Coastal Engineering we recommend to choose from the following **courses**:

Sector	Topic	Course	Semester	ECTS	University
	13. Environmental Impact Assessment	13.1. Environmental Impact Assessment	Autumn	6	UCV
Coastal Engineering	14. Sustainable Built Environment	14.1. Sustainable Built Environment	Spring	6	UTCB
	15. Natural Hazards in Coastal Regions	15.1. Natural Hazards in Coastal Regions	Spring	6	UTCB

Employability

Regional development organisations (governmental and NGO), Public administration (local, regional, national), Environmental agencies (governmental and NGO), Business development, investment and insurance organisations, Civil engineering, Real estate.

Topic: Environmental Impact Assessment				
Course: Environmental Impact Assessment				
University: Universidad Católica de Valencia				
6 ECTS	Language:	English		

The Environmental Impact Assessment (EIA) is a systematic process of identifying future consequences of a current or proposed action. This activity leads to identify, predict and evaluate the economic, environmental and social impact of development activities, to provide information on the environmental consequences for decision-making and to promote environmentally sustainable development through the identification of appropriate alternatives and mitigation measures. The course will describe the legislative framework of the EIA and the structure, content and general methodology in environmental impact studies and will provide knowledge about the main environmental problems and specific actions in the maritime and maritime-terrestrial domain.

Course activities:

Group Project: elaborate an EIA, including the characterization of the biotic, abiotic and socio-economic environment, the proposal of measures to mitigate environmental impact and the establishment of a monitoring plan.

Field trip: visit to various activities on coastal areas to discuss the usefulness of Environmental Impact Assessment as a procedure to integrate the environmental variable in decision-making.

Soft skills:

Conflict management, group/team working, written communication, project management.

Prerequisites:

Background in general concepts of natural sciences (biodiversity, ecology and geology) and/or social sciences (economy, demography, law, management, etc).

More information:

https://www.ucv.es/oferta-academica/grados/grado-en-ciencias-del-mar/seccion/guias-docentes/fichero/ficheroquiadocenteingles/id/270207/plan/2008/mod/2016

Topic: Sustainable Built Environment (SBE)

Course: Sustainable Built Environment (SBE)

University: Technical University of Civil Engineering Bucharest

6 ECTS Language: English

What will you learn:

According to <u>fib</u>, sustainability is 'a key conceptual principle to be considered in all human activities including design, construction, operation, maintenance, repair and demolition of any building or civil engineering work forming the built environment'.

In this course students will get an overview on civil, industrial, agricultural, water supply lifelines and coastal constructions. They will learn about the environmental impact, natural and anthropic hazards affecting the coastal built environment, circular principles of SBE (including social and economic) for buildings (durability, environment design, integrated life cycle assessment), European standards and regulations, challenges (low energy buildings with good thermal comfort, waste treatment, reduction of CO2).

Course activities:

Application of the SBE concept for precast structures.

Cases study for waste management considering also life cycle assignments and footprint on the environment.

Soft skills:

Analytical skills, group/team working, problem solving, written communication, presentation, innovation/creativity, project management.

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainable-maritime-tourism/sustainable-built-environment/

Topic: Natural Hazards in Coastal Regions				
Course: Natural Hazards in Coastal Regions				
University: Technical University of Civil Engineering Bucharest				
6 ECTS	Language:	English		

This course introduces students to natural disasters in coastal regions, such as earthquakes, tsunami, landslides, floods and erosion. The major types of natural hazards will be described, analysed and assessed in terms of their underlying causes as well as their socioeconomic and environmental impacts. This course will emphasise the mechanism, origin, and impacts on coastal regions and focus on the approaches for mitigating and minimising hazards. The lectures in this course are designed as an introduction to the Topics and provide students with the basic scientific principles for each major natural hazards. Discussion sessions will focus on recent scientific findings in the fields covered by the course.

Course activities:

Group project, experts' lecture.

Soft skills:

Analytical skills, group/team working, research, written communication, presentation

Prerequisites:

Computer literacy, basic use of Microsoft Office package. The course will introduce all the necessary technical notions.

More information:

https://utcb.ro/en/eu-conexus/minor-programmes/coastal-development-and-sustainable-maritime-tourism/natural-hazards-in-coastal-regions/

Summary. Courses in 2022-23 academic year

In the Table below presents all the courses that will be offered in a virtual or blended teaching mode from the academic year 2022-23.

Sector	Topic	Course	Semester	ECTS	University	My study plan
	1. Biodiversity	1.1. Hydrobiology- Planktology	Autumn	6	AUA	
		1.2 Agrobiodiversity and Ecosystem Services	Spring	6	UROS	
	2. Coastal	2.1. Protected Areas and Recovery of Species	Autumn	6	UCV	
Biodiversity and Coastal Zone Management	Management	2.2. Coastal Zone Management	Autumn	6	KU	
	3. GIS	3.1. Geographic Information Systems and Remote Sensing	Spring	6	UTCB	
		3.2. Geographical Information System and Remote Sensing	Spring	6	KU	
	4. Environmental Education	4.1. Environmental Education	Autumn	6	UCV	
		4.2. Pollution / Depollution (water, air, soil)	Spring	6	UTCB	
Environmental Education	5. Ecological Psychology	5.1. Ecological Psychology	Spring	6	UNIZD	
6. Effects of Climate Change	6 Effects of	6.1. Effects of Climate Change	Spring	6	UTCB	
	Climate Change	6.2. Effects of Climate Change on Coastal Areas	Autumn	6	AUA	
Human Geography	7. Culture and Heritage	7.1. Cultural Geography	Spring	6	UNIZD	
		7.2. Maritime Cultural Heritage	Autumn	6	KU	
	8. Maritime Geography	8.1. Coastal Geography (practices,	Autumn	6	LRUniv	

Appendix 44

Sector	Topic	Course	Semester	ECTS	University	My study plan
		stakeholders, conflicts, governance)				
		8.2. Social Economic Geography of Coastlands	Autumn	6	KU	
	10.Tourism and Sustainability	10.1. Sustainable Tourism Development	Spring	6	KU	
		10.2. Sustainable Tourism Development	Autumn	6	AUA	
		10.3. Tourism Facing Digital Transition	Spring	6	LRUniv	
Sustainable Tourism 11. Spatia Planning Maritime 12. Perfor Built Faci		10.4. Coastal Tourism Facing Social and Environmental Transition	Spring	6	LRUniv	
		10.5 Entrepreneurship and Innovation around Sustainable Tourism		6	LRUniv	
	11. Spatial Planning of Maritime Tourism	11.1. Spatial Planning of Maritime Tourism	Spring	6	KU	
	12. Performant Built Facilities for Sustainable Tourism	12.1. Performant Built Facilities for Sustainable Tourism	Spring	6	UTCB	
	13. Environmental Impact Assessment	13.1. Environmental Impact Assessment	Autumn	6	UCV	
Coastal Engineering	14. Sustainable Built Environment	14.1. Sustainable Built Environment	Spring	6	UTCB	
	15. Natural Hazards in Coastal Regions	15.1. Natural Hazards in Coastal Regions	Spring	6	ИТСВ	

Reminder: for fulfilling a Minor, students must select 5 courses from at least 2 different sectors (within the same minor) offered by 3 universities (one may be his own university)

Appendix 45