







sustainability
geofusion
startups
networking
industry 4.0







green accounting

virtual reality

regional resources

network economics place-marketing

supply chain security



# **NEW**

Master's degree in economics



## Hungarian Central Bank - Centre for Economic Geography

## Regional and Environmental Economics MA

A 4 semester full-time course, providing a MA degree in economics.

Meets the most recent international issues in environmental sustainability.

Provides an Erasmus semester accessible in the EU universities within the Schengen Zone. Provides Stipendium Hungaricum Scholarship accessible.

Location of the studies: Budapest (Info Park).

Dormitory accommodation available.

Launch: September 2024.

#### **Basic information**

The two year-long programme in Budapest, capital city of Hungary in Central Europe, gives you a MA degree in economics. The curriculum provides you the latest knowledge and expertise available in the world's best universities regarding the financial structure of sustainable environment and the hi-tech methods of network economy with which you are a competitive economist anywhere in the world. Since Hungary is within the Schengen Zone of the European Union, if you choose to attend this programme, you are entitled to apply for ERASMUS scholarship at one of the many Western European partner universities for a whole semester. There is a relatively cheap dormitory accommodation available, too in the Budapest campus of the John von Neumann University. Tuition fee is cheap, if compared to other Western or Central European universities, due to the initial introduction of the programme in 2023.

#### **Objectives**

The purpose of the programme is to train economic specialists who, with their theoretical and methodological knowledge, can explore the social dimensions of environmental problems and analyzing social, cultural and ecological processes from an economic perspective, taking into account the interactions between social and natural systems. The training enables students for creative and innovative participation in the development of global and regional development and environmental policies, strategies, and programs, considering the dimensions of the economy and society, the cultivation of economic geography, regional and environmental social sciences. They are competent in solving independent analytical and planning tasks, working, and managing groups, as well as conducting analyzes and research related to sustainable development in the academic, public, and private spheres. The two, globally unique specialization of the programme includes network economy and urban marketing. Since the operation and the methods of both network economy and urban marketing depend on high technology; the students get acquainted with the latest ICT technologies of the Metaverzum like VR, AR, MR and XR and they learn to apply them in economics and environmental, regional issues alike. It is also unique in European higher education regarding economics. They are prepared to continue their studies in doctoral training.

#### **Admittance requirements**

BA or college degree (in economics, law, administration, technology, agriculture, natural sciences, social sciences, environmental sciences, geography, teaching majors) or MA university degree (in the same fields as above). Online admittance interviews.

#### Job perspectives

After accomplishing the studies the students can find jobs related to economic strategic planning and economic sustainability in companies and banks. They can hold positions as leading analysts, strategy creators and consultants in state administration organizations, foreign affairs, foreign trade, and organizations with international relations. They can also be employed as national experts or full-time employees of international organizations like the UN, World Bank, OECD, EU, UNCTAD, FAO, ESPON, EEA, delegated by their countries. They can apply for positions as economists in business, or at environmental and nature conservation organizations. Companies dealing with spatial planning, development, sustainability may also employ them. Likewise state organizations or research institutes. In university education, students graduated from this program can find jobs at departments with regional, environmental, economic or management profiles. At local governments they can apply for positions in settlement marketing or urban development as experts or consultants.

Tuition fee: 2750 Euros/semester. For scholarships, see Stipendium Hungaricum Programme

#### Academic calendar:

Application	1 <sup>st</sup> semester:	2 <sup>nd</sup> semester:	3 <sup>rd</sup> semester:	4 <sup>th</sup> semester:
until 31 <sup>st</sup> July	September –	February –	September –	February –
2024	December 2024	June 2025	December 2025	June 2026

Information: Ms. Catherine R. Feuerverger-Szinicja:

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Programme leader: Dr. Balázs Forman

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**Application:** 

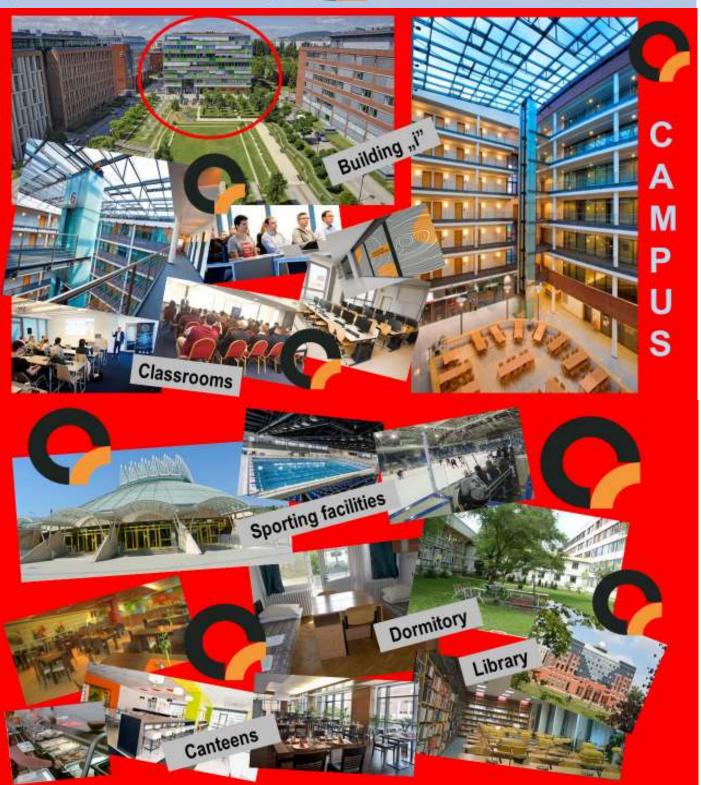
See: http://john-von-neumann-university.dreamapply.com

### **COURSES**

CURRICULUM		MODULES				
Courses in	Applied Economics and Methodology					
Economic and Social	Community Economics					
Sciences	Social Sciences					
Courses in	Regional and Environmental Analysis Methods					
Environmental	Regional Economics and Politics					
Economics	Environmental Economics					
	Regional and Local Economic Development					
NEW ASPECT: Urban Marketing		National, Regional and Local Marketing				
Specialization. Choice1		Local Development				
NEW ASPECT: Network Economy		Network Economics				
Specialization. Choice 2		Sectoral Network Development and Technologies				
Elective courses		On Geography, Competitiveness, Smart Cities				
Tutorials	Tutorials Metaverzum (NEW METHOD IN ECONOMICS), Diploma Work					

Besides the traditional economic and environmental issues, this Programme offered by the Neumann University gives you a choice of **two globally unique** specializations (place marketing and networking in economics) and globally unique methods of economics in the immersive technologies of the Metaverzum.







For ERASMUS¹ credit equivalence

REGIONAL AND ENVIRONMENTAL ECONOMICS CURRICULUM OF THE PROGRAMME	Number of lessons per week per course per semester, credits and type of lesson  Four semesters  (C: credit, T: theoretical P: practical profiles)											
		1 fall			spı	ring		3 fal		4 spring		
	С	T	Р	С	Ť	Р	С	Т	Р	С	Ť	Р
CORE SUBJECTS												
Finance I. Monetary and Fiscal Policies	6	2	2									
Applied Economics I. Microeconomics and Economics of Natural Resources	6	2	2									
Environmental Studies I. Environmental Economics	6	2	2									
Applied Economics II. Corporative Strategies of Automotive Industry	3	2	2									
The Regional Structure of Hungary	3	2	0									
Connectography I. Spatial Analyses and GIS Geographical Information System				6	0	4						
Place Marketing I. Regional and Urban Marketing				6	2	2						
Regional Policy and Economics I. Macroeconomics and Growth Theories				6	2	2						
Regional Policy and Economics II. Business Site Selection and Development Policy				3	2	0						
Economic and Environmental Law				3	2	0						
Finance II. Geography of Financial Markets							3	2	0			
Connectography II. Network Economics							3	2	0			
Urban Sociology							3	2	0			
Connectography III. Metaverzum										3	0	2
Regional and Local Planning and Development										3	0	2
Local Governance										3	2	0
SPECIALIZED SUBJECTS												
Degree Work Tutorial I. Diploma Work							6	0	4			
Degree Work Tutorial II. Diploma Work										9	0	4
Specialization 1: Place Marketing courses			<u> </u>									
Place Marketing II. TDM – Tourism Destination Management and Marketing				3	2	0						
Place Marketing III. Country Image Country Brand				3	2	0						_
Place Marketing IV. Urban Marketing Research Methodology				Ť	_		3	2	0			_
Economic Development I. Urban Economics							3	2	0			
Urban Management Practice									Ü	3	0	2
Specialization 2: Network Economics courses										·	Ů	_
Connectography IV. New Trends in Geography				3	0	2					$\blacksquare$	
				3	0	2						
Network and Geography of Services				J	U		3	0	2			_
SDG Sustainable Development Goals I. Wellbeing, Wealth Perspective of Sustainability							3	0	2		$\vdash$	
Transportation Planning and Logistics							3	U	2	2	0	2
Geography and Economics of the Internet										3	U	
Elective subjects			Ι ο			ı				_	_	
Economic and Social Geography	3	2	0									
Regional Geography I. Economic Geography of Europe	3	2	0					_	_			
Environmental Protection and Nature Conservation							3	2	0			
Sustainable Urban Development							3	2	0			
Environmental Studies II. Environmental Policy							3	2	0			
Regional Policy and Economics III. Modernization and Crisis Management							3	2	0			
Economic Development II. Rural Development							3	2	0			
Value-based Identity Management							3	2	0			
SDG Sustainable Development Goals II. Green Accounting										3	2	0
Geopolitics										3	2	0
Leadership Economics and Training with Immersive Tools and Technologies										3	0	2
Project Management										3	0	2
Regional Geography II. Economic Geography of the World				3	0	2						
Sustainable Ecosystems				3	0	2						
Environmental Studies III. Environmental Management							3	0	2			
Economic Development III. Smart Cities							3	2	0			
Economic Development IV. Regional Competitiveness										3	0	2
Cross-border Cooperation										3	0	2



<sup>&</sup>lt;sup>1</sup> European Union Programme for higher education mobility



#### **COURSE DESCRIPTIONS**

short summaries of all the courses in the programme

#### Finance I. Monetary and Fiscal Policies (Core)

The course will give the students comprehensive knowledge of the regulation and composition of the Hungarian and the EU budgets; comprehensive knowledge of local government and public investment budget planning and comprehensive knowledge of the instruments of the monetary policy. The students will have thorough knowledge of methodology, finance and mathematics in monetary and fiscal issues. These include: government revenue, taxes, contributions, levies, climate-friendly taxation, government expenditure, public goods and financing public services, public education, health care, pension. The teaching material includes the division of tasks between the state and the individual, the international comparison of state involvement and budget, the tasks of the central banks, the quantitative money theory, the exchange rate policy, the interest rate policy and the modern money theory. The role of public income distribution in reducing territorial inequalities and redistributing available wealth between generations and different social groups are also discussed. The graduates should be able to work in a team and take into account different interests at the same time, but in each case they should be able to make informed decisions on their own. **Credit requirement**: exam. Written test from the Law on Public Finances and Local Governments. In the oral exam, the items given at the lectures and determined on the basis of the obligatory literature.

#### Applied Economics I. Microeconomics and Economics of Natural Resources (Core)

After accomplishing the course the student is well acquainted with the concepts of microeconomics, its elements and laws, the welfare economics, and sustainability. The student knows the role of prices, substitutability, innovation, scarce resources in the modern economy. The student is well acquainted with the economic models of the extraction and the use of natural resources. The student is able to think long-term in his/her decisions and take responsibility for the next generations and their well-being. The student is likely to represent the interests of sustainability and future generations in professional, public and public forums. The teaching material includes the theories of price, marginal benefit, the value paradox, the theories of sustainability and maximizing consumer utility, the role of substitutability, innovation, and time horizon in optimizing the extraction and use of resources. The corporate production costs, the role of total, and marginal cost functions in determining pricing and corporate strategies, the relationships between margin points, marginal cost, and price are dealt with. Other items include: market structures, competitors, oligopoly, monopoly market, planned economy, ownership, ethical foundations, efficiency, optimality, market failure, cost-benefit analysis. The optimal models for the extraction of renewable and non-renewable natural resources are explained, as well as the Prebisch and Solow-Hartwick's theories on the expected evolution of natural resource prices, the extraction and price development of energy resources and ores. The fundamentals of the circular economy are introduced. **Credit requirement**: exam. Written entry from the knowledge of microeconomics before the oral exam.

#### **Environmental Studies I. Environmental Economics (Core)**

The student is familiar with the theory and practical application of environmental economics, sustainability and environmental assessment. He/she knows the following items: the European Union's system of environmental regulation and its peculiarities in Hungary; the concept of the ecological footprint, its influencing factors; the externalities and possibilities of internalization, the regulation of the reduction of pollution emissions. The student is aware of the risks to food, energy and environmental security and their relation with population growth; knows the objectives of the European Green Agreement, the concept and challenges of the circular and biomass economy. It has the range of knowledge required for postgraduate study in environmental policy, environmental protection and environmental economics. Upon the accomplishment of this course, the students will be familiar with the following topics: sustainable development, biodiversity, externalities, ecological footprint, and carbon trading system. Food, energy and environmental security, the relationship between population growth and biocapacity, social and environmental impacts of deforestation and degradation, environmental, air, water, land, soil and noise pollution. The European Green Agreement, Achieving zero net GHG emissions by 2050, linear and circular economy and building a circular biomass economy. **Credit requirement**: exam.

#### **Applied Economics II. Corporative Strategies of Automotive Industry (Core)**

The student knows in detail the areas of operation, interest groups and ways of managing a for-profit company, the milestones in the life of companies and possible choice alternatives. The student is familiar with the economics of strategic controlling and industrial organizations. The student acquires a comprehensive knowledge of the current situation of the mobility and automotive industry responsible for the emission of a significant part of the gases that cause warming, and the possible directions of its development. The graduate student, as an employee or elected official of a central or local administration, will be able to negotiate with investment planning companies and have a meaningful and positive impact on their investments. The graduate student will be able to start their own business and manage it consciously and competently and will be able to participate in decision of location, investment, and logistics of larger companies or participate as an external consultant. In the stakeholder-type corporate governance model, the graduate will be able to achieve all the groups involved in the operation of the company - employees, management, state, local governments. The graduate student will be able to manage the businesses under his / her management successfully and ethically in the long run. The course deals with items like: the basics of business economics, forms, organizations, interest groups, owners, management, employees, unions, state, NGOs and corporate governance models: shareholders and/or stakeholders. Corporate strategic planning and controlling, production management, human resource management, financing, acquisitions, research and development and logistics. Commerce and marketing, consumer support systems and FDI (foreign direct investment), competition strategies and the industry characteristics of the automotive industry. Electric cars, Daimler-Benz, BMW, Volkswagen, General Motors, Ford, Toyota, Honda, Suzuki, Renault, Fiat-Chrysler, Icarus are also introduced, as well as the Taylorism, Fordism, Toyotism, just-in-time system and the, MPL (Mercedes Production Line). Credit requirement: exam.

#### The Regional Structure of Hungary (Core)

The students will get to know Hungary's spatial structure, its main physical, social and economic characteristics. They are able to understand and connect the problems related to the spatial structure of the country (causes, processes, solutions); and to build simple cases concerning these problems, as well as to formulate their own individual positions on these matters based on their own analysis to develop strategies for tackling complex problems in their own countries, too. The student is open to receiving new information, new specialized knowledge, learning and adapting innovations related to the spatial structure of Hungary; they are open to taking on new, individual, and collaborative tasks and responsibilities; they cooperate with the instructor and fellow students during learning; they increase their knowledge and make a point of staying abreast of news and developments. The aspects introduced are the following: short historical geography, population transitions and movements, agriculture, development of infrastructure and industry, network of settlements. The influence of the Trianon Agreement on the regional structure of Hungary. Regional effects of the Hungarian regime change: industrial firms, agriculture, local labour market, income disparities. The new economy in Hungary: foreign direct investments, financial sector, business services, education, IT. The main trends of population movements from 1990. The new facts of regional structure. The geographical, environmental and economic analysis of Hungary serves as a sample for the students to perform similar analyses on their home countries. **Credit requirement**: exam.

#### Connectography I. Spatial Analyses and GIS Geographical Information System (Core)

The aim of the course is to introduce students to GIS as the most important analytical method in the field of spatial sciences, as a first step in terms of "Connectography". Students are familiar with the concept of spatial information systems (GIS), the main types, dimensions and applications of the systems in the research and operation of both economy and society. Students are able to solve basic economic and environmental analysis tasks independently, using SPSS and TelR system that uses statistical data editing in maps. They are able to form an individual reasoning based on their own - spatial - analysis to support the arguments concerning economic-social-environmental problems. With GIS solutions suitable for multifactorial, multidimensional spatial data processing, they are able to develop strategies for solving complex problems, to plan the solution, to make decisions, and to provide professional advice to economic actors. GIS, which enables multifactor data synthesis, always appears in the professional horizon of students in connection with their knowledge of environmental sciences. Their approach is open and inclusive towards new technologies. The student independently selects and applies the relevant problem-solving GIS or Big Data or satellite data-based methods in the areas of organizational policy, strategy and management, and performs economic analysis, decision-making and consulting tasks independently. Items included in the teaching material: raster and vector systems, satellite imagery, area classification based on weighting, site selection, decision supporting. Distance measurement and functions, spatial relationships, networks, gravitational and potential models. Movements, flows, gravity zones. Exploration and examination of nodes/hubs and networks. Visualization of results obtained. Credit requirement: practice grade

#### Place Marketing I. Regional and Urban Marketing (Core)

The student owns relevant and comprehensive knowledge in the areas of settlement marketing, settlement branding, region marketing, region branding, as well as country marketing and country branding. Understands the differences between the models of tourism marketing and settlement marketing. Familiar with their economic relevance. Capable of preparing professional summaries, analyses, as well as lecturing, actively participating in professional discourses, applying the modern tools of infocommunication and presentation, also in foreign language. Keywords: independent analytic work, presentation skills, team-work. Open-minded, self-confident and engaging regarding the new achievements of economic science and practice. Pursues improving self-competence and developing professional networking. Ready to share professional and societal knowledge that regards country image, branding, as well as their significance – with the professional and the broader public. The course contains the following main topics: Regional and settlement marketing (RSM), the particular operational mechanisms, contribution of the private and public spheres, theoretical and practical approaches to RSM, urban marketing, internal, external, professional and partner images, place brand, urban branding, citizens' satisfaction and identity, difference between settlement marketing and that of tourism, tools of marketing communication. The course is aimed at providing skills in the efficient management of RSM.

Credit requirement: exam.

#### Regional Policy and Economics I. Macroeconomics and Growth Theories (Core)

The student knows the concepts and laws of macroeconomics, is familiar with the early, modern and latest location theories, knows the relationships between the spatial flows of factors of production, is familiar with methods for analysing areas consisting of many regions, knows the most important elements of the new economic geography, the theories of economic growth and their application in the multi-regional space. The student will be able to understand and critically analyse macroeconomic processes and to measure regional differences, explore the causes, consequences, possible developmental and developmental trajectories and to establish an economic theory of national and regional development plans. Students are aware of the diversity and uniqueness of the regions. They are aware that the non-homogeneous multitude of regions varies from region to region and justifies different developments and interventions. Students will know that the development of regions cannot be left to market mechanisms alone. "Only the decline goes by itself, something has to be done every day for successful regions." Success orientation and social sensitivity at the same time. The student will be able to independently perform regional and national level analyses. It is the responsibility of the student to have the theoretical knowledge necessary to participate in the preparation of well-founded regional and development plans and programs. The following items will be introduced during the course: location selections via the site theories von Thünen model, Weber, Lösch, Christaller, Hotelling, Alonso's models. Porter diamond model. Macroeconomics of a closed economy. The role of the labour market, macro supply, the state, the role of foreign trade, the role of money. Means of measuring, comparing and redistributing income. Macroeconomics of small open economy assuming the free flow of factors of production and the state as an external factor. Regional growth - convergence and divergence. Spatial organization of multinational companies. **Credit requirement**: exam. Writing a macroeconomics test exam before the oral exam.

#### Regional Policy and Economics II. Business Site Selection and Development Policy (Core)

The student knows the Hungarian and European institutional system and regulations of regional policy. The student is familiar with the conceptual framework, actors and levels of territorial, regional, settlement and rural policies of the EU. After accomplishing the course the student will be able to comprehend a regional planning, strategy, program and project. The student is able to independently perform regional level analyses, set up a problem and goal tree. It is the responsibility of graduates to ensure that the available resources are used for the benefit of the public and that the selected projects and development plans are sound, realistic, feasible and effective for the public. Students will know the institutional system of regional development, the role of the parliaments, governments, legislation in spatial development in the Unitarian state model, the decentralized model, the regionalized state model and the federal state model in order to improve the competitiveness of regions and regional economic development. The teaching material contains the regional business networks and industry districts, the aspects of the development of regional clusters, the stages and steps of regional economic development, the territorial management and monitoring, the modern and postmodern territorial policies, the territorial policy of the welfare state and the neoliberal turn and finally the European Union's regional policy. Credit requirement: exam.

#### **Economic and Environmental Law (Core)**

The course deals with the European company law and the related areas of law: the company law regulation in Hungary, the rules of corporate liability and the changing of company status, the dissolution of organizations (legal forms of liquidation) and bankruptcy proceedings in a specialized way for the master's degree in economics, and enforcement of debt settlement. In the field of environmental law, the course deals with the presentation of environmental legal principles, institutional system, regulatory instruments, rules on environmental elements (land, water, air and wildlife, and the built environment) and international environmental law institutions, conventions and other regulatory instruments. The student knows the basics of different (legal, regional development) fields related to economic enterprises, the domestic and international environmental regulatory framework. The student is able to apply EU environmental law in practice. The student can interpret EU environmental law in a professional manner during the years of employment as a responsible intellectual and will be able to realistically interpret current global environmental law. The student is responsible for compliance with professional, legal, ethical, environmental standards and regulations related to the operation, work and conduct of businesses. **Credit requirement**: exam. It includes a written mid-semester test. Students completing the test at the excellent level (86%+) can absolve the semester with an excellent (5) mark by writing an essay and performing it in the form of a presentation.

#### Finance II. Geography of Financial Markets (Core)

The students are expected to know the operation of financial intermediaries – commercial and specialized banks, savings banks, stock exchanges, brokerage firms, insurance companies, investment and pension funds. They should obtain a comprehensive knowledge of the various financial products, services and innovations, the ways of financial management of various economic risks. The teaching material includes the introduction of the global financial centres and capital flows. The students after completing the course are expected to be able to design a sophisticated corporate finance strategy and to conduct operational financial planning and conduct transactions in theory. They have to be able to analyse a variety of corporate and market financial data, the innovation in designing; and tailoring the right financial services meeting demands. They should see the appropriate risk management and commitment to ensure that a product range is always adapted to the needs and risk-taking capabilities of the client and the company. The graduate student should be able to compile the appropriate financial package in an autonomous manner. In their work, graduates are able to take responsibility for the appropriate level of risk in the financial products they develop and the transactions. The teaching material involves the following items: from commodity money to virtual money, the operation and regulations in a commercial bank; financial innovation and product personalization; real estate lending and markets. The US and Hungarian mortgage markets, car lending and leasing; foreign trade transactions, export credit, futures transactions, factoring, the assessment of corporate and country risk factors. Life and property and passenger insurance, securities, markets, stock exchanges. The Wall Street. Derived or derivative products, the Portfolio Theory. Systemic causes of the 2008 and the 2022 financial crises. The fundamentals of the financial regulation of the European Economic and Monetary Union. London's role in international financial markets. Dubai and the Middle East. Peculiarities of banks and financial markets in the Islamic countries. The financial systems of Hong Kong, Singapore and China. **Credit requirement**: exam.

#### Connectography II. Network Economics (Core)

The subject is newly introduced in Hungarian higher education. It is relying on the knowledge regarding spatial information systems and allows the students to know the newly forming structure of global economy (New World Order). The student formulates independent new conclusions, original ideas and solutions, in which a new type of "network" approach to geography prevails. Having the knowledge and skills acquired during the course, the student is able to independently perform relevant problem-solving, world economic analysis, decision-preparation and consulting tasks in areas that are important from the point of view of organizational policy, strategy and management. Some items included in the teaching material: situation, centre, hubs, periphery, neighbourhood, distance, direction, dependence, time, cost, shape, structure, dimension, movements - migration, diffusion, innovation chain, spatial relations, gravitational and potential models. The basic units per micro-organization, state institutions, site, place of residence. Geographical time, economy. Spatial paths, spatial relations, economic gravity relations, spatial elements. Infrastructure, externalities, the concept of infrastructure, comparison of infrastructure elements, spatiality, networks of hubs, economic characteristics, infrastructure in monocentric and polycentric economies, the impact of transport hubs on market potential. The new cartographic method of depicting the above is "associative" geography, "geofusion," and "radius" geography adapted from the military sciences. **Credit requirement**: exam.

#### Urban Sociology (Core)

After accomplishing the course the student knows the spatial processes and its characteristics in the metropolitan areas, the structure of urban infrastructure, the urban social connections and networks and its development. The student can carry out research and compiling professional analyses in urban sociology, participate in talks or debates on different topics in urban sociology or they can even hold lectures on urban sociology. The students have ethical, well-mannered, detached point of view towards people, society and social phenomenon/problems. They have both ecological and sustainability concerns, development of knowledge, providing motivation to the fellow workers. The teaching material includes the following items: the foundations and development of rural and urban sociology. The main research topics in Urban Sociology. The origins and development of the metropolitan areas. Urbanisation processes. Social and geographical mobility. Globalism and cities, the global cities as hubs of the global network economy. Urban traditions. City and community. Urban spaces and social connections. Local social networks and communities. Ethnic minorities, social inequalities, poverty, homelessness and the differentiation of the urban society. **Credit requirement**: exam. Midterm and final exams, written exam with tasks on practice.

#### Connectography III. Metaverzum (Core)

The aim of teaching the subject: as immersive technologies (VR, AR, XR) are increasingly present in various subsystems of society, in addition to the military and entertainment industries, they can be found in almost all areas of the economy, from mechanical engineering to creative industries, marketing and trade, to the field of health and education, thus it is essential that students become acquainted with them as well. The aim of the course is for students to master the basic concepts of immersive technologies, basic technical and financial economics, and the main results of the developments so far, and the latest trends. They have an idea of how AR (augmented reality) technologies works, where they can be implemented, what they can be used for. Students can familiarize themselves with the technical - financial and expert conditions related to AR application, as well as other (legal, ethical) aspects. Finally, their plans for realizing their ideas will be evaluated by an industry expert. The student knows the most important technical knowledge related to immersive technologies (AR, VR, MR, XR, Block chain, NFT), past and present directions of development, economic (business) financial professional, human resources and other (legal, ethical) conditions of their application. They get to know the relevant sources from which they can get authentic information about the given technologies, the latest development trends, innovative applications. They are able to learn about immersive technologies. They are able to see what type of immersive technology can (may) be relevant in their special field, what the directions of the developments are, what kind of investments, developments and what other conditions are required for it. Even in decision-making situations requiring a complex approach, they will make their decision in full compliance with applicable laws and ethical standards. The students are constantly educating themselves in the field of application of the networked world economy and immersive technologies in their field of expertise, and strive to recognize when their application is professionally justified, what added value they represent in a given situation. The knowledge to be acquired: basic technological knowledge of immersive technologies, directions of development, technical, economic, financial, human resources and competence knowledge of their application. Testing and using the most modern hardware tools used in the development. **Credit requirement**: exam.

#### Regional and Local Planning and Development (Core)

Students will learn about the major interrelationships, theories and conceptual frameworks of the fields of science and economics related to spatial development. They will know and understand the specific processes involved in this area of expertise (biological, technical, logistical, commercial, legal, social and economic conditions of management), and their interrelationships. Students will obtain an in-depth knowledge of the specificities of the functioning of regional and local planning and the reasons for these specificities, the IT and programming tools and methods used in spatial development practice, and they are aware of their legal regulations, too. They will know the planning and implementation methods, rules and the related specificities in the field of spatial development, both in a Hungarian and an international context. Students will know the legal framework of regional and local development, the specific research methods and abstraction techniques of spatial development, the logistical guidelines and the ways of working out the practical aspects of theoretical issues. Students will be able to understand and formulate a professionally informed opinion on Hungarian, international and social issues in the field of local and regional development. Students will be able to independently interpret and apply legislation relevant to their professional activity. They will develop an ability to define, plan and organise territorial development activities, to ensure the conditions necessary for the implementation of the management activities defined. and to supervise and monitor their implementation on a permanent professional basis. They will be receptive to the use of rural development methods and tools that may provide effective solutions. Major items included in the teaching material: European urban development and networks, urbanisation and types of gentrification, the development of global cities in the US, Latin America, Japan, the urbanisation of China and in Africa. **Credit requirement**: practice grade.

#### Local Governance (Core)

Students will learn about the main contexts theories and conceptual systems of local governance. Students will develop an in-depth knowledge of the specificities of local governance and the reasons for these specificities, the IT and programming tools and methods used in local government practice and their legal regulation. Students will know the social need for local community development and the related public policy context. Students will be able to understand and formulate an informed opinion on Hungarian and international economic and social issues related to local governance. Students will learn how to define, plan and organise the system of activities related to local governance, and to ensure the conditions necessary for the implementation of the management activities defined, and to supervise and monitor their implementation. Students will become open and receptive to learning about and applying modern and innovative procedures and paradigm shifts in local governance. They will become committed to local environmental protection and sustainable urban development. Students will approach the understanding and credible communication of summarized and detailed issues in local governance with a collaborative spirit. Students will have a high degree of autonomy in developing broad and specific local governance issues, in representing local spatial economic perspectives. Students will represent ethical issues in local governance and they will be able to plan and manage local public services independently. The teaching material includes issues like local revenues, tasks, expenditure, infrastructure, energy, water, waste, traffic, pollution, public transport, land use, sewerage, fire, education, housing and poverty, homelessness and urban planning. **Credit requirement**: practice grade. An essay is to be submitted.

#### Degree Work Tutorial I-II. Diploma Work (Required)

A special part of our master's program in regional and environmental economics is the project task, the preparation of the diploma thesis. The Project Tasks are partly the fields of student specialization and further professional deepening in the direction of individual interest, in two directions: practical and theoretical. In the theoretical, i.e. research-based and essaytype versions, as well as in the practical versions. The students choose from the topics related to international business or economics. In the Project Tasks a specific problem related to the direction of the programme must be processed so that the student can come up with a well-founded solution at the end of the dissertation. During the preparation of the project task, the professional foundations related to the topics learned so far should be reflected. Project Tasks must be prepared with a fixed logical process and within a given formal framework. The Project Task allows the student via methodological preparation top develop his/her communication skills during independent work and regular consultations and mid-year and end-of-year oral reports. During the elaboration of the Project Task, the basic expectation of the students is that the literature background of the chosen field is processed on the basis of scientific journal articles, thus deeply immersed in the research results of each field. During the work the students have to set up a hypothesis related to a given problem, presenting the theoretical background and the methodology suitable for proving the hypothesis, collecting relevant data, preparing their dissertation and interpreting the results, which will be the final output of the diploma work. To complete the course, students must master the basic rules for selecting, interpreting, and using various special databases related to the specialization. During the Project Task, students will gain background knowledge that will help them develop their leadership competencies. The dissertation has to be written in English.

#### Place Marketing II. TDM – Tourism Destination Management and Marketing (Specialized1)

The student is familiar with the concepts, theories and context of marketing, tourism marketing and destination management. The student is aware of the spatial and sectoral trends of global tourism, also from the perspectives of hospitality and accommodation. The student understand the tasks associated with organizing and sales of local supply and local brand. The student knows the context of regional and settlement development. The student demonstrates good communication and management skills. The student is capable of aligning the supply and demand sides of tourism with appropriate product development. Innovative and proactive stance. The graduate can take responsibility to be marketed and present as an integrated brand the represented city, or region in the global tourism market, coordinating the activities of the various economic and social groupings. Topics include: tourism as significantly reduced during the COVID 19 pandemic, opportunity to improve the efficiency of tourist destination management. Improving TDM necessitates seeking novel solutions and innovation in numerous areas. To be competitive in the global market of tourism is possible only with prices comparable with those of the competitors. Airport costs, landing fees, as well as costs of access to airports. Sustainability may mean reducing the ecological footprint of services, associated with tourism, or redesigning the offered services aligned with changing climate conditions. Reaching the earlier numbers of foreign tourists is possible only by improving the direct accessibility and interconnections by air and rail. One of the important parts of innovation in TDM is implementing and developing permanent and temporary attractions of the destinations. Challenges of over-tourism. Attractions also include museums, urban landscapes, natural heritage, locations of UNESCO World Heritage, festivals and Mega Events. Credit requirement: practice grade. Students' presentations prepared during classes, in groups, compulsory for all, at least at six occasions.

#### Place Marketing III. Country Image Country Brand (Specialized1)

The aim of the course is to describe all the factors and methods that can contribute to the planning of the proper positioning and communication of a country. The student has acquired and has relevant, comprehensive knowledge of country image and country brand models, their management and economic significance. The student can prepare professional summaries and analyses in his/her field of expertise, to give lectures, to take an active part in professional discourse, using the modern methods offered by modern infocommunication and presentation tools, also in foreign languages. Topics include country image, country brand building, and application of branding concepts to different geographical units. New concepts for location branding and repositioning. Comparison of image building and reconstruction. Comparing the importance of a unique image/identity and the use of branding elements. The role of emotional elements in the relation of consumers. Investigation of collaborative destination branding as a function of different destination characteristics and industry structures. Investigations concerning the branding stakeholders. Examining the factors of success that regards the branding in practice. Exploring the links between culture and branding. Evaluation of side-by-side images in the local brand. **Credit requirement**: exam.

#### Place Marketing IV. Urban Marketing Research Methodology (Specialized1)

The student has relevant and comprehensive practical knowledge of settlement image and settlement brand, as well as country image and country brand models, their strategies, and the methods used. The student is able to prepare professional summaries, analyses, create strategies, give lectures, and actively participate in professional discussions in his / her field (settlement, region and country branding), using modern methods of infocommunication and presentation tools, also in a foreign language. He/she is able to participate in large-scale and complex settlement marketing, regional and country marketing projects, group problem solving and to work independently as an analyst, having presentation skills, capable of research and editing in teamwork. The student can be characterized by a cultured, ethical and objective intellectual attitude towards people and social problems, paying attention to wider social, sectoral, regional, national and European values (including social, ecological and sustainability aspects). He/she is ready to share professional and social knowledge with both professional and non-professional audiences – this is of great importance in the field of settlement and country branding. The teaching material involves the specific operating mechanisms of regional and local marketing, analytical work to design brands, the preparation of decision-making in management decisions. The elements of territorial identity (design, culture, communication). The target markets/groups: guests, business people, external investors, tourists, local residents, employees, local investors, and public administration, foreign markets, governmental and civil non-profit organizations. Communication techniques, quantitative and qualitative issues. **Credit requirement**: practice grade.

#### Economic Development I. Urban Economics (Specialized1)

This course includes the theoretical foundations of the most important factors for the regional and urban economic development. To reveal the basis of economic development of a city, its gravity zone i.e. its region, with its development opportunities has to be revealed. The graduate student can do research in finding the economic potentials and opportunities in a given city, and can define and give priority to development goals. He/she can promote the community planning and the cooperative approach with correct identification of involved actors in the regional economic development. The course deal with the following main issues: the recognition and identification of strategic strengths, weaknesses, opportunities and threats related to the regional urban development; stakeholders, municipalities, citizens, businesses, central government, political parties, NGOs, churches in urban development. Important influencing factors like the urban development policy and concepts, the EU and the national, regional strategies, development plans at different territorial levels, sectoral plans, financial issues of urban development, financial resources of local municipalities. The major economic tools of regional development FDI attraction and urban marketing. **Credit requirement**: exam.

#### **Urban Management Practice** (Specialized1)

During this course students will develop an in-depth knowledge of the specificities of the functioning of municipalities. They will learn about the IT and programming tools and methods used in local government practice, and their legal regulation. They will be familiar with the relationship between local government and local society, the social need for community development, and the related environmental policy context. Students will have a knowledge of modern management theory and applied psychology that can be applied in local governance, about the legislative environment of local government, the different levels of management functions, methods of evaluation and conflict management techniques. Students will be able to understand and formulate an informed opinion on Hungarian and international economic and social issues concerning the functioning of local governance. Students will be able to define, plan and organise the system of activities of local governance, to ensure the conditions necessary for the implementation of the management activities defined, and to supervise and monitor their implementation on a permanent professional basis. Students will know and have a commitment to the overall and specific relationships and professional identity that make up the specific character of the spatial economy and its personal and community role. Students will be committed to environmental protection and a sustainable rural economy. Students will have a high degree of autonomy in developing broad and specific local governance issues, in representing spatial economic perspectives. Students will think over and advocate for ethical issues in local governance. They will be able to plan and manage urban management processes independently. Credit requirement: practice grade. An essay is to be submitted

#### Connectography IV. New Trends in Geography (Specialized2)

The course summarizes the new methodological directions of economic geography from the aspect of sustainability and environmental science. The student is familiar with the new research methods of economic geography in the 21st century, which can be used to define the regularities of the global world economy operating on networks and their nodes. He/she learns the method of radius and talent geography including the latest findings. The student is able to recognize the geoeconomical drivers of global processes and is able to see and illustrate new contexts that can contribute to the effectiveness of environmental research through geofusion, GIS synthesis, and associative geographic representation. He/she is able to prepare professional summaries and analyses, to give lectures, to take an active part in professional discussions, using the modern methods of the infocommunication and presentation tools like VR, AR. They are able to map the geographical distribution of innovation and creativity with the methods of new economic geographical trends (radius and talent geography, network analyses, geofusion, GIS applications, associative cartographic representation). Students are open and inclusive to new developments in economics and practice. They are ready to share their professional and social knowledge with both professional and non-professional audiences, and the rich methodological repository of associative geography is especially suitable for this. Students demonstrate proactive and responsible behaviour in social and public affairs, which is in line with the consequences and expectations of global environmental and environmental economic processes. **Credit requirement**: exam.

#### **Network and Geography of Services** (Specialized2)

The student gets to know the different areas of the service sector, their operation, economic laws and geographical dimensions in the global market for non-financial services and their competition, too. The student gets acquainted with the practices best practices of communication and organization skills, and the good ability to design services geographically. Innovativeness, initiative attitude is demanded. The graduate is able to organize the various service packages responsibly in his/her work. The topics of the course are the following: commodity-producing economy to modern products and services and a postmodern sense of life. The modern economy and business services. The microeconomic foundations of how a modern economy works: perfect information, protection of intellectual property, and so on. Advanced business services. Financial service providers and financial markets. Accountants and auditors provide the perfect information. Legal services, international law firms. Legal arbitrage. Off-shore areas. Business consulting. Franchise systems. Patents. Software industry. History of Microsoft, Google and SAP. Division of labor between the US, Ireland, Israel and India. From concept creation to detail programming. Clusters. The market for international higher education. The Anglo-Saxon countries. Rankings, funding, curricula. The Single European Higher Education Area. From the free movement of labor to the Bologna Convention. The role of Erasmus in student and teacher mobility. Movie clusters from Hollywood to Nollywood. From entertainment to national cinema. Health insurance models and their display. Conference and health tourism and their providers. Hotel chains and airlines. **Credit requirement**: practice grade.

SDG Sustainable Development Goals I. Wellbeing and Wealth Perspective of Sustainability (Specialized2) During the course the student gets acquainted with the foundations of the environmental economics theory of the wealth perspective of sustainability and the related empirical research. He/she becomes familiar with the public database of the World Bank, the OECD, the EEA and becomes capable of identifying and analysing data for own research. The student gets acquainted with the concept and theory of modern environmental economics that underlies the description of the interlinkage between the socio-economic system and the natural environment, i.e., the biosphere, and with the tangible and intangible assets and social capital. The student becomes competent in distinguishing the notions of welfare and wellbeing, as well as the economic concepts thereof. The student gains competence in comprehending the concepts of sustainability and satisfying the needs of generations; becoming familiar with the modern thinking of environmental economics, masters a new stance that regards contemplating the interlinkages between economic growth and sustainability. The theoretical foundations justified by empirics reinforces the contemplation of the student about the interlinkage between the society and the natural environment. Credit requirement: exam. Data analysis using a database independently with statistical methods.

#### **Transportation Planning and Logistics** (Specialized2)

The students get to know how transportation planning and logistic processes work. The students also learn the methodologies and the techniques of transportation and logistics processes. The students can model, calculate, and plan transportation and logistics processes. He/she can recognize and understand the role of the elements of transportation and logistics processes. The students can do individual and teamwork, take leading role in teams. The main topics include Transportation planning. The role of flows and space optimisation in transportation. Division of labour in the society and space optimisation. The basics of economics in route planning. Pareto-optimum in costing and environmental effects. Pareto-optimum in networking. Transportation policy of the European Union. Infrastructure as a public good. The role of the state in transportation planning: financing and price regulations. Specialities of road, rail, water and maritime transportation. Air transportation planning. Financing of the development of transportation networks. Quality in public transportation. Credit requirement: practice grade. Grading is based on presentations on a given topic held by students.

#### **Geography and Economics of the Internet** (Specialized2)

The student knows the "geographical" dimensions of the Internet. The student knows the economic bases of the operation of the Internet and its economic and social consequences and effects. The student is familiar with the changing market conditions as a result of the Internet: new products, new services, new companies, new jobs, new value chains, and changing market competition. The student knows the critical points of Internet regulation, in the order to be familiar with the online business and public services. The student is able to select the adequate data at his/her workplace. The student is able to adapt the knowledge in the everyday and professional life and uses strategies of his/her business, institution and personal life to be innovative and ethical. The student can autonomously use the online space for their need in their personal and professional life. In the same time, he/she has responsibility to preserve the ethical use of Internet. Some of the main topics included in the course: Malthusian dynamics and the postmodern era. The Fourth Industrial Revolution. The "Brisbane Club" model: mind, society, economy as complex evolving networks. Internet: hyper competition, hypergrowth and the struggle for attention in global markets. Challenges and barriers in the age of Big Data. Smart and portable technologies. Competing online platforms, fragmentation and online marketplaces. Artificial Intelligence (AI), Robotisation: human vs. robots in the age of artificial Intelligence. Economic barriers of AI. Optimizing the supply chain. Block chain: decentralization of power, authority, and design of management systems. Institutions in the age of block chain. Credit requirement: exam. Analysing the online network features of a selected specific institution, or enterprise, or person.

#### Economic and Social Geography (Elective recommended)

The aim of the course is to present the basic facts and tendencies of the social and economic geography, to explore regional characters of the main social and economic phenomena, processes, and present the possible methods of the treatment of the potential challenges entailing this. The students understands how human geography fits into the system of social sciences, as well as the foundations of social and economic geographic theory, its practical uses and limitations, its sub-disciplines, the main features, research questions and problems. They are able to make connections between social, economic and territorial problems and they can formulate simple arguments to solve the problems. They can formulate their own individual positions based on their own analysis as well as develop strategies for tackling complex problems. The student is open to absorbing new information, new specialized knowledge, and learning about and adapting innovations in social and economic geography. The following main items are introduced during the course: population and health geography, fertility and mortality, natural increase and decrease, governmental population policies, demographic transitions, migration, refugees, natural disasters, epidemics and wars. Equality, equity and social justice, culture and landscape geography, languages and religions. Ethnic affiliation, identities and landscapes. Prosperity, tourism, the world's food supply, the geography of the food production, the world's agriculture today. The geography of the energy, the industry and the services. Sustainability and sustainable development. **Credit requirement**: exam.

#### Regional Geography I. Economic Geography of Europe (Elective recommended)

The aim of the course is to acquaint students with the reshaping regional geography of Europe. It aims to give an image of the geographical aspect of the economic and political changes of recent years. In addition to the geography of the 27 countries of the European Union, the UK, Norway and Switzerland and the Balkans, the potential areas for enlargement of the Community; and Eastern Europe, which is at the forefront of the Eurasian "Heartland" and has enormous economic policy significance, are not left out. The student gets to know the spatial economic structure of Europe, the continent's natural endowments, environmental status, economic structure, network infrastructure, financial markets, urban centres, social processes, demography, diverse culture and tourism, political processes at regional and country level. The student is able to interpret the economic backgrounds of political processes, is able to orientate in the European geographical space, can place Hungary's endowments in European context. The student has a problem-centric vision, problem-solving thinking. In his/her approach to social problems, he/she pays attention to a wider range of social, sectoral, regional, national and European values, including social, ecological and sustainability aspects. The students initiate responsible behaviour in social, political, respects in public affairs; they are aware of Europe's geographical and environmental characteristics in a realistic interpretation of economic processes. Main topics include: labour market, demography, international labour flows and migration, trends in urban networks, growth poles. Environmental EU conventions. Economic structure of Germany. Comparison of Alpine and Caucasus Regions. The "gates" of Western Europe. The Mediterranean, Scandinavian, Baltic countries, the Central European countries and the V4s, the Balkans. Eastern European countries and the Russian economic structure. **Credit requirement**: exam.

#### **Environmental Protection and Nature Conservation** (Elective recommended)

The aim of the course is to acquaint students with the concepts of the environment, the environment and nature conservation; to provide a sound basis for being able to apply environmentally friendly technologies in practice. In detail: Forest Act of 1879. 1996 LIII. Act on the Protection of Nature. Act LIII of 1995 on the general rules for the protection of the environment. Sustainable development as a principle of environmental regulation. Principles: precaution, prevention, recovery, liability, cooperation, information, information, publicity, user pays, polluter pays more. Environmental use, utilization, environmental impact, environmental pollution. General rules for environmental elements and their protection. Acid rain, ozone layer climate change, protection of land, water, air, natural and built environment. Hazardous waste. Environmental remediation and remediation. Act of XLIII 2000 on waste management. By-product, secondary raw material, waste recovery. Household solid waste. Fundamentals of a circular economy. Hazardous waste. General protection of natural values and natural areas; national parks. Geological formations, water resources. Rare and scientifically valuable plants, plant associations, parks, groups of trees. Rare or endangered domestic or endangered domesticated animal species, landscapes with characteristic landscape appearance, natural environment of archaeological sites, historical and cultural monuments and their natural environment, natural environment of monuments. conservation of endangered life forms and farming areas. Priority protection of natural values and natural areas. National parks, nature reserves, Natura 2000 areas, ecological corridors. The student knows the most pressing environmental and nature problems and their possible solutions. Students can recognize and solve environmental and nature protection problems. Students are able with the above knowledge, to decide what approaches can solve the problem. They can compile professional written materials in accordance with the requirements of the profession, thus enabling the effective transfer of knowledge. They strive to protect the values of our environment. They able to make independent decisions, take responsibility for his decisions. **Credit requirement**: exam.

#### Sustainable Urban Development (Elective recommended)

The student is familiar with the operation and life cycles of urban production systems, with the life cycles of the use of urban spaces, demand, supply, different urban interest groups and the importance of ownership, with the different directions, theories and practices of urban development and urban development. The student knows the basics of multifunctional, multi-purpose design methods for use in a multivariate environment. The graduate student is able to reconcile different goals, opinions and actions of different interest groups. The graduate student can make decisions alone but responsibly for the benefit of the public and future generations. The teaching material of the course introduces the following main topics: an integrated approach for Europe 2020, urban and peripheral areas in local economic development strategies, an integrated approach to sustainable urban development, Big City: problems and challenges, urban rehabilitation, community participation, PPP urban/rural, the role of urban and rural renewal in a regional and environmental context, heritage and identity, economic and environmental development, 5 stages of sustainable settlement development: "feasibility", "diagnosis", "development", "implementation", "monitoring and evaluation".

Credit requirement: exam.

#### Environmental Studies II. Environmental Policy (Elective recommended)

The students will get a comprehensive knowledge of environmental policy tools for income differentiation and Earth sustainability in dimensions such as climate change, nitrogen and phosphorus cycles, biodiversity loss, ozone depletion, ultra-dust deposition, ocean acidification, use of fresh water, chemical pollution. They are concerned with global problems, their effects on economic-social-ecological systems. They will be able to develop strategies for solving complex environmental problems, to take resolutions, to plan solutions, to make decisions, and to provide professional advice to economic operators. Able to prepare professional summaries and analyses in the field of environmental policy, give lectures, actively participate in professional discussions, using modern methods of infocommunication and presentation tools. The teaching material includes the following main topics: the institutional system of the European Union's environmental policy, community grants in the field of environmental protection, the DG Enviro, the European Environment Agency, the legislation, founding. The Hungarian institutional system and goals of environmental policy. The aim of the course is to give students a comprehensive overview of global environmental challenges, like that of the climate change, mitigation, adaption, carbon-neutral policy. **Credit requirement**: exam. Presentation of case studies in the field of environmental economics, policy and protection.

#### Regional Policy and Economics III. Modernization and Crisis Management (Elective recommended)

The student is familiar with the concepts, interpretations and contexts of modernization and globalization, the theories and categories used in comparative economics, with German, French and East Asian economic theories outside of mainstream economics. The student knows the peculiarities and characteristics of the development trajectory in each country. The student will be able to make comparative analyses between countries and to think ahead for decades or even longer. Critical attitude and intellectual curiosity about the situation in other countries is needed in managing the available resources and data. It is the student's autonomy to read as much of the available domestic and international literature as possible and to incorporate it into his or her thinking. The teaching material includes the following main topics: the modernization strategies, the economic theories in the economic centre and the catching-up peripheries, the differences between English and German economics. Understanding globalization, and the economic specificities of the use and distribution of natural resources among Christian, Islamic, and Buddhist cultures. The course focuses on the role of natural resources in economic development, capital accumulation, and sustainable development. The role of investment, market and regulation in economic development. The role of education and innovation in economic development. the UK, the USA, Germany, France, Ireland, Finland, Italy, Spain, Greece, Japan, South Korea, Singapore, China and the oil exporter countries. Credit requirement: exam. Writing homework on milestones in the development of a chosen country. Negotiation simulation for resolving the situation of a selected country in crisis: Ukraine, Russia, the EU, Venezuela.

#### Economic Development II. Rural Development (Elective recommended)

The aim of the subject is to learn the theoretical and practical bases of the most important regional context in agriculture and rural farming and the most important macro and micro-economic laws of the region. Accordingly, it addresses different types of economic space, delimitation possibilities of regional growth and regional development theories, spatial planning issues, territorial price and demand issues, regional monopoly issues, micro-economic decision-making problems and spatial networking issues, mathematical and statistical and spatial information technology used in the research of regional and environmental sciences. It is a relevant and comprehensive knowledge of regional and rural development policies and environmental sustainability, the ecological and social potential of developments and the relationship of determinants. In detail, the students can recognise the impact of economic growth, population explosion and income differentiation on the Earth's dependability. Regarding rural issues, they can provide technical briefings, analyses, lectures, participate actively in professional discussions, using state-of-the-art in "modus operandi" of the info-communication. Topics include rural development in Europe and in the USA. Development and characteristics of the Common Agricultural Policy of the EU. Rural development policy and grants in 2020-2027. Environmental, economic, and social processes and the countryside. Strategic issues for rural development in Hungary, new opportunities for rural development and agrobusiness, agro-marketing. **Credit requirement**: exam.

#### Value-based Identity Management (Elective recommended)

The student knows the main components of national identity, the relationship between local identity and creativity, the organizational framework and tools of public administration and local government for the exploration and preservation of national values. The student can integrate local and national values into the process of local, regional and national marketing; is able to systematize the values attached to the place and to integrate their preservation in a creative way into the framework of business and economic enterprises. Students know how local values can appear in the settlement image manual. They are able to organize value-collecting colleges (communities). Through their approach, they are open and inclusive towards national values and committed to exploring, preserving and maintaining them, not only in practice but also in the socio-economic-legal environment. With this, they are also open towards the preservation and maintenance of the nation-state. The students show proactive and responsible behaviour in social and public affairs in the field of protection and maintenance of national values. The curriculum of this course sheds light on the brain biology-based relationship between place-based identity and creativity and systematizes! **Credit requirement**: preparing a feasibility study for a mobile application as a homework assignment, which sets out to publish a national value for an age group – with a view to sustainability.

#### SDG Sustainable Development Goals II. Green Accounting (Elective recommended)

The course aims at getting the students familiar with the system of environmental accounting, its significance and its application. The student gains knowledge regarding the linkage between managing the economy and environmental statistics. Broadened competence regarding the comprehension of statistical data, comprehension and application of professional literature in English and getting information on an international organization (United Nations), through its website. Broadening perspectives by understanding the importance of empirics and the practical application of multidisciplinarity. The student is getting practice in comprehending information underlined by data, assessing the reality of its content and applying the tools of responsible thinking. The course includes items like: the human and economic capital, the natural and environmental resources, the concept of environmental accounting system of the United Nations, the background of its development and its position within the statistical systems, the classification of ecosystems, the statistical system of the ecosystem accounts, the UNCTAD and EEA databases. The environmental accounting enables the sustainability analysis of the socio-economic system. The monitoring and the measuring of environmental sustainability, as well as the generation of the necessary data. **Credit requirement**: exam. Writing and essay discussing a statistical concept selected by the student.

#### **Geopolitics** (Elective recommended)

Students know the basics of the functioning of the world economy and world politics, in particular the importance of powerful geopolitical/geo-economic strategies and their impact on the global, megaregional regional levels and nationstate processes, and understand the basic concepts of geopolitics and are able to interpret their impact on the world's economic and political system. They can interpret the geopolitical strategies of great powers, to analyse the most important elements of 'hard power', 'soft power' and the ways in which power is exercised through economic means, and to assess the impact of all this on low- and middle-income countries, and the opportunities for these countries to take advantage of the positive opportunities of great power strategies and to avoid (or at least reduce) the negative effects thereof. They will be able to interpret professionally the local effects of world economic and world political processes, the significance of a given global economic and world political situation, which will enable them as responsible intellectuals to realistically evaluate the world political and economic news during their professional careers. Within their field of expertise, they are able to assess the impact of current world economic and political events on their workplace As a result, they have an understanding of the international standing of their workplace, and as decision-makers, and they will be able to position the operation of their workplace at different regional levels. Some items to be introduced during the course: the traditional (orthodox) and the new (critical) geopolitical tendencies, the concept of political space, the essential geopolitical consequences of the global world economy, geopolitical directions of the USA, the Ukrainian - Russian war, the geopolitical importance and changing role of transatlantic relations, the Eurasianism, the OBOR, the changing role of the Central and Eastern Europe region in the 21st century. Credit requirement: exam. Geopolitical case studies regarding the actual world political news.

#### Leadership Economics and Training with Immersive Tools and Technologies (Elective recommended)

Content elements of the training: authenticity, reliability, stability, activity, improvement, growth, consistency. Leadership. Communication, responsibility, support, strength. Moral and ethical foundations. Flexibility, clarity, motivation, openness to new ideas, time management, team building. Basics of management accounting. Since this course is a practical one, all the above skills are practiced in a VR environment, where students can learn about the applicability of VR (virtual reality), AR (augmented reality) and MR (mixed reality) environments, the basics of their production, and the management-level application possibilities of immersive technologies both in the field of environmental management and the regional economy. Thus students will learn about leadership skills, methods of their development, the essence of immersive technologies (Metaverzum). Students will be able to develop their leadership skills, and apply immersive technologies (augmented reality, virtual reality). Students become open to adopting and using new, experiential technologies alongside traditional methods. They will be open to learn about and apply modern and innovative practices in organisational behaviour and leadership. Students will take responsibility for professional and managerial decisions. They will have autonomy to develop comprehensive organisational governance programs. **Credit requirement**: practice grade. Active participation in the lessons is compulsory. During the skill development training, students will prepare a personal development plan, keep a progress diary, and write reflective notes on their own experiences and practical lessons learned, as well as on real-life developments, using the theoretical knowledge acquired during the course.

#### **Project Management** (Elective recommended)

The aim of the course: to get acquainted with the basics, methodology and most important functions of project management through the processes of planning, implementation and monitoring. Main topics of the classes: project types. Breakdown of projects into processes, allocation of resources, preparation of schedule, cost plan, monitoring plan. Funding of projects in a tender system. Get to know the elements of the tendering and the systems of monitoring, completion and settlement of accounts. The student acquires general project knowledge and acquires practice. In order to achieve the goal, he/she will be able to structure the tasks from a project perspective, to interpret the processes and sub-processes in a uniform way, and to evaluate their linkage. The student gets to know the essence of tender projects, the methodology of their planning, monitoring and accounting. He/she learns about project management as an essential leadership competence and is able to participate constructively in the design and management of research and application projects. He/she can apply the acquired knowledge in practice. **Credit requirement**: practice grade. Demonstrating the acquisition of the knowledge gained during the course through the preparation of one's own project plan.

#### Regional Geography II. Economic Geography of the World (Elective)

The aim of the course is to transfer to students a general regional spatial knowledge of the geography of non-European countries and the Asian, American continents, primarily to facilitate geostrategic geopolitical orientation. The students know the Asian, American, African economic spatial structure, the main cultural, social, religious characteristics, natural resources, and the practice of their management on distant continents, as well as the state of the environment, the geographical reference points of global processes. In the light of the acquired knowledge, he/she is able to interpret the global processes of geopolitics and environmental policy, their driving forces. The students can be characterized by a cultured, ethical and objective intellectual attitude in their approach to global social problems, focusing on wider social, sectoral, regional, national and global values (including social, ecological and sustainability aspects) in their works. Some of the items the course deals with: the formation and borders of states, the role of migration, religions and cultures. The economy of states, their natural resources, their foreign trade. TNC (transnational cooperation). Geography of East Asia: Korea, Japan, Vietnam, Singapore, Indonesia, Malaysia; China, the Middle East, Turkey, Iran, Syria, Lebanon, Israel, Saudi Arabia, the UAE, Algeria, Egypt, Ethiopia, Nigeria, South Africa, Canada, Mexico, the Caribbean, the USA, Brazil, Argentina, Chile, Venezuela, Australia, New Zealand, Russia. **Credit requirement**: practice grade.

#### Sustainable Ecosystems (Elective)

Participants will know the concept of ecosystem services, know the main sectoral characteristics of environmental management; will be familiar with the theoretical background of environmental valuation, cost-based approaches, methods based on revealed and stated preferences and their application; will know the typical environmental, economic and social problems of rural areas and the main strategic concepts for sustainable rural development; know the main features of national and EU environmental policy. Students will be able to interpret documents based on environmental assessment techniques; will be able to interpret and analyse sectoral policies; will be able to identify environmental, economic and social problems related to environmental management and rural development. The knowledge of research methods will be enhanced. Students will be able to prepare high quality technical materials, both orally and in writing. Graduates will have a complex approach when sustainability issues are concerned, involving natural, social and economic aspects simultaneously. Students will independently prepare a case study, and present it during the semester. Graduates will be able to take a complex approach to sustainability issues in decision-making at sectoral level. Topics discussed are the following: landscape, as a complex combination of many species and factors, landscape ecology, classification of ecosystems (natural and man-made), conservation areas and ecological corridors. Sustainable landscape and forest management. Sustainable water management, soil conservation and agriculture. Identification of ecosystem services, monetary and non-monetary valuation. Land use conflicts. Environmental policy implications, payments for ecosystem services. Credit requirement: practice grade.

#### **Environmental Studies III. Environmental Management (Elective)**

The student has scientific knowledge about the carbon, nitrogen, sulphur and water cycles; about the most important chemical, metallurgical, food and construction technologies. He/she is aware of the scientific, technical and economic characteristics of the circulation of materials. The students knows the sustainable management of the natural resources. The student can combine knowledge of economics and natural science and can think interdisciplinary. The graduate has good persuasive and communication skills. The student is committed to the conservation of natural environment, protection of climate and climate policy. The students have value-driven and practical thinking and they feel responsibility to protect our natural environment, and climate. Topics include: the significance and role of environmental factors in the activities of management. Environmental auditing. The place and role of environmental accounting in management. Life cycle assessment. The market of pollutions. Review of environmental regulations in the US (end of pipe), the EU (whole process) and Japan (voluntary agreements). Environmental management systems and performance evaluations, reporting. The environmental marketing. Sustainable, environmentally friendly consumption. Environmentally friendly quality assurance systems. Social responsibility. The ultimate goal of the course is to provide knowledge about the theoretical foundations and practices of the principle of the circular economy. **Credit requirement**: practice grade.

#### Economic Development III. Smart Cities (Elective)

The course offers the theoretical foundations of the most important factors necessary for the economic development of the regions, as well as the principles of regional development. It also contains the knowledge of development policy plans and concepts that play an important role as a framework (development plans at different territorial levels, sectoral plans). Recognition of the solutions offered by the "smart" technology in the regional economic development is very important for urban competitiveness (knowledge of databases, international cooperation, and good practices). Community planning and supporting the cooperation of development actors and the recognition of the good practices in the sustainable regional economic development are discussed during the course with attention paid to the social, economic and environmental factors as well. Some topics: urban management solutions based on ICT (info communication technologies). Smart energy, smart transport, digital community development, technology-supported smart city solution. The Creative Class and the creative industries, legal digital environment, and financial tools. **Credit requirement**: practice grade. Depending on the needs of the students work individual or in teams, they write a case study and at the end of the semester they present their results.

#### **Economic Development IV. Regional Competitiveness (Elective)**

The student knows the different theories and practical applications of economic, territorial and corporate competitiveness. The student is familiar with regional, urban economics, development theories, operations and management, and finance. The student also learns the methods of multidimensional strategic planning in a multivariate environment. He/she is able to analyse many factors simultaneously according to their importance and take them into account in the planning process. The student can use spatial planning that includes multiple target variables and can analyse large databases. The student is able to formulate and implement short-, medium- and long-term goals and strategy as well as operational plans. The graduate is able to independently analyse spatial (regional) social, economic phenomenon, solve problems and formulate realistic strategic goals to be achieved the development plans. The main topics of the course include: competitiveness models, the comparisons of corporate and urban competitiveness, Porter's Competitiveness Model, the Diamond Model and the concepts of territorial competitiveness. The EU competitiveness model, productivity, income, employment. The Hungarian Pyramid Model of Regional Competitiveness. The role of public goods and services in territorial competitiveness. The competitiveness of cities. **Credit requirement**: practice grade.

#### **Cross-border Cooperation** (Elective)

Cross-border co-operation is an activity aimed at strengthening and promoting good neighbour relations between the population and the institutions on both sides of an international border, and not only geographically near the border, but also in the institutional background of a country. In addition, it is important to enable the population to improve their quality of life, and the socio-economic potential of the area can be facilitated by partners in the border areas of neighbouring countries, while respecting internal conditions (mainly legal) and the state's foreign policy. The subject is based on the practice of European implementation examples of the idea, reflected in the Association of European Border Regions (AEBR). The student is familiar with European regulatory and project development efforts related to cross-border international relations. The student can consider situations in cross-border structures, to recognize opportunities for cooperation and development provided by natural borders instead of administrative borders, and to find opportunities to support them. The student can analyse large databases and can formulate implement short-, medium- and long-term goals and strategy as well as operational plans. The student takes responsibility for compliance with professional, legal, ethical standards and rules related to work and conduct in international cooperation. Items like the INTERREG program; mirror, twin, and joint projects; twin cities, and the Danube Cooperation are also introduced during the course. **Credit requirement**: practice grade.