

# Faculty of Economic and Social Sciences

## IMPORTANT NOTES

If for one subject you can find several different types (lecture, practice, laboratory) of courses then please choose one and only one course from each type in order to be able to perform the subject's requirements successfully. Civil Engineering courses are on the website separately. Courses chosen from the offer of Faculty of Civil Engineering will be checked and arranged individually by the departmental coordinator.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20A001	Management and Business Economics			Mid-semester mark	4
Course type	Course code	Course language	Timetable information		
Lecture	EEN12BM	English	TUE:08:15-10:00; THU:08:15-10:00		

<https://edu gtk.bme.hu/>

The course introduces the essentials of management as they apply within the contemporary work environment and gives a conceptual understanding of the role of management in the decision making process. Particular attention is paid to management theories: principles of management, marketing management, quality management, production and project management. For problem formulation, both the managerial interpretation and the mathematical techniques are applied.

Budapest University of Technology and Economics

Faculty of Economic and Social Sciences

Course Syllabus

and Requirements

Management and Business Economics

2.

Course code

Semester

Hours per week

(Theory/Practice)

ECTS credits

Language of Instruction

Level

(BSc/BA/MSc/MA)

BMEGT20A001

fall/spring

4/0

4

Hungarian

BSc/BA

3. Course supervisor (name, title, department):

János Kövesi, dr. Habil, Professor, Department of Management and Business Economics

4. Lecturers:

Name:

Position:

Department/Institute/availability(Room, e-mail address):

Szilvia Bíró-Szigeti, PhD

Associate Professor

Dept. of Management and Business Economics, QB305, szigetisz@mvt.bme.hu

János Kövesi

Professor

Dept. of Management and Business Economics, QA315, kovesi@mvt.bme.hu

Noémi Kalló, PhD

Associate Professor

Dept. of Management and Business Economics, QA308, kallo@mvt.bme.hu

Tibor Szabó, PhD

Assistant Professor

Dept. of Management and Business Economics, QA317, tiborszabo@mvt.bme.hu

5. Preliminary knowledge required:

Basic concept of companies and their operation.

6. Academic prerequisites:

-  
7. Objectives and description of the course:

The course introduces the essentials of management as they apply within the contemporary work environment and gives a conceptual understanding of the role of management in the decision making process. Particular attention is paid to management theories: principles of management, marketing management, quality management, production and project management. For problem formulation, both the managerial interpretation and the mathematical techniques are applied.

8. Teaching methods:

Lectures.

9. Requirements and assessment:

4 midterm exams have to be taken during the semester. The grade will be determined by the sum of the midterm exams ( $4 \times 25 = 100\%$ ), there are no minimum requirements for the individual exams.

10. Exams, make-up duties and make-up exams:

Maximum 3 of the 4 midterm exams can be repeated or make up at the end of the semester. There are no final make-up exams in this course.

11. Office hours:

By making appointment with the lecturers.

12. Course material, compulsory and recommended readings:

Materials provided by the lecturers: [www.mvt.bme.hu/segedanyagok](http://www.mvt.bme.hu/segedanyagok)

13. Workload and detailed class schedule:

Topics to be discussed, readings required for the class, other assignments

Week 1

Marketing management: Creating Customer Value and Engagement

Week 2

Consumer behaviour, Analyzing the Marketing Environment

Week 3

Market research, Product and brand management

Week 4

Service management, Promotion management

Week 5

Communication management, Online marketing

Week 6

Quality management: Principles of quality management, the brief history of quality management systems

Week 7

Overview of quality assurance systems based on ISO 9001:2000 Quality Management System.

Week 8

Overview of quality assurance systems based on Total Quality Management System.

Week 9

Production-economics: production systems, manufacturing models, product-process matrix.

Week 10

Inventories, inventory control systems, costs of carrying stocks

Week 11

Principles of management: Resources of a firm, firm as an organization.

Week 12

Functions of managerial processes

Week 13

Corporate strategies, Team work, communication in an organization.

Week 14

Repeat of midterms

Subject code	Subject name			Requirement	ECTS credit
BMEGT20A048	Marketing			Exam	5
Course type		Course code	Course language	Timetable information	
Lecture	EEN12BM	English			
Practice	GEN12BM	English			

<https://edu gtk.bme.hu/>

Learning outcomes: After completing the course, the students will be able to understand the role of marketing in an organization. Students will become familiar with marketing tasks, tools and strategies. Through practical work students will be able to elaborate certain marketing topics using the knowledge acquired during lectures.

Content: Introduction to marketing. Creating customer value. Analyzing the marketing environment. Company and marketing strategy. Marketing information and customer insights. Market segmentation and targeting. Positioning. Creating competitive advantage. Consumer markets and buyer behavior. Business markets and business buyer behavior. Products and services. New product development. Designing pricing strategies. Marketing channels.

Integrated marketing communication.  
Budapest University of Technology and Economics  
Faculty of Economic and Social Sciences  
Course Syllabus  
and requirements  
Marketing  
2.  
Course code  
Semester  
Hours per week  
(Theory/Practice)  
ECTS credits  
Language of Instruction  
Level  
(BSc/BA/MSc/MA)

BMEGT20A048

fall

3/1/0

5

English

BSc/BA

3. Course supervisor (name, title, department):

Zsuzsanna Szalkai, PhD, Associate Professor, Department of Management and Business Economics

4. Lecturers:

Name:

Position:

Department/Institute/availability(Room, e-mail address):

Zsuzsanna Szalkai, PhD

Associate Professor

Department of Management and Business Economics, szakaizs@mvt.bme.hu, Room QB304

5. Preliminary knowledge required: -

6. Academic prerequisites: -

7. Objectives and description of the course:

After the course the students understand the role of marketing in an organization. Students get familiar with the marketing tasks, tools and strategies. Through the practical work the student is able to elaborate certain marketing topic using the knowledge acquired on lectures.

8. Teaching methods:

Lectures and seminars

9. Requirements and assessment:

Team project: 20%

Presentation: 10%

Exercises on Seminars: 10%

Team project has two parts: written report and presentation. Students will work in a maximum of 5-member group on a selected market and company.

10. Exams, make-up duties and make-up exams:

Exam: 60%

Final exam in the exam period. Exam can be repeated in the exam period.

Overall assessment:

87-100%: excellent

75-86%: good

63-74%: satisfactory

50-62%: passed

0-49%: failed

11. Office hours:

Wednesday 10.00-12.00 Bld. Q Room B 304

12. Course material, compulsory and recommended readings:

Ph. Kotler, G. Armstrong, J. (2016): Principles of Marketing. 16th Ed. Pearson

Lecture slides

Handouts

13. Workload and detailed class schedule:

Topics to be discussed, readings required for the class, other assignments

Week 1

Introduction to Marketing. Creating Customer Value

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Week 2

Analyzing the Marketing Environment. Marketing strategy

Week 3

Marketing Information and Customer Insight

Week 4

Market Segmentation, Targeting and Positioning. Competitive Advantage

Week 5

Consumer Markets and Buyer Behavior

Week 6

Business Markets and Business Buyer Behavior

Week 7

Product Strategy and New Product Development

Week 8

Marketing services

Week 9

Marketing Channels: Delivering Customer Value

Week 10

Understanding and Capturing Customer Value. Pricing Strategies

Week 11

Integrated marketing communication part I: advertising, sales promotion

Week 12

Integrated marketing communication part II: PR, direct marketing and personal selling.

Week 13

Team presentations

Week 14

Team presentations

Subject code	Subject name			Requirement	ECTS credit
BMEGT20BX4U002-00	Innovative Business Models			Mid-semester mark	5

Course type	Course code	Course language	Timetable information
Lecture	EEN01GT	English	
Practice	GEN01GT	English	

Subject code	Subject name			Requirement	ECTS credit
BMEGT20M420	Project Management			Mid-semester mark	2

Course type	Course code	Course language	Timetable information
Lecture	EEN07KO_S_H	English	

The aim of the course is to introduce project management definitions and methods. The course places great emphasis on awareness of the software solutions. Projects are interpreted as organizational and management tools and as techniques for individual production processes and services.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN03	Quality Management			Exam	5

Course type	Course code	Course language	Timetable information
Lecture	EEN07BM	English	

<https://edu gtk.bme.hu/>

During the semester students get acquainted with the most important issues and methods of the improvement of quality management systems. They are provided with an overview of the most common quality philosophies applied for the improvement of quality in the productive and service industry. We elaborate the application and requirements of self-evaluation models and their roles in total quality management philosophy. Another objective is to improve the skills of students regarding the application of quality management tools and techniques.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN04	Strategic Management			Mid-semester mark	3

Course type	Course code	Course language	Timetable information
Lecture	EEN06GT	English	

This course gives you the core concepts, frameworks, and techniques of strategic management, which will allow you to understand what managers must do to make an organization to achieve superior performance. Various

components of strategic management, such as tools of strategy analysis, sources of competitive advantage, strategies in different industry contexts and the fundamentals of corporate strategy are to be discussed throughout the course.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN06	Service Marketing			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Lecture	EEN07GT	English			

After the course, based on basic marketing knowledge, students get familiar with the characteristics of service marketing. Content: characteristics of services, service quality, buyer behaviour of services, marketing strategies for services, marketing tools of services (7Ps: product, price, place, promotion, people, process, and physical evidence), capacity management, yield management, service recovery.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN10	Logistics and Supply Chain Management			Mid-semester mark	5
Course type	Course code	Course language	Timetable information		
Lecture	EEN06GT	English			
Practice	GEN06GT	English			

The course introduces the concept of supply chain management and its three main areas: distribution logistics, production logistics, and procurement logistics. It provides an overview of facility location and layout planning problems. As the main objective of supply chains is meeting the demand, a particular attention is paid to transport and distribution problems. Moreover, such approaches of modern production logistics are provided like JIT production and lean management.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN11	Technology Management			Exam	5
Course type	Course code	Course language	Timetable information		
Lecture	EEN06GT	English			

The basic concepts of technology management  
Life cycle theories of technologies and factories  
The new technology and the organization  
The new technology and the society: technology assessment  
Managing new product development  
Managing product innovation  
Introducing new process technologies  
Auditing methods of technology management  
Information technology management  
The basics of strategic management of technology  
Technology portfolio analysis  
Technology roadmapping  
Managing technological demands and project portfolios  
Managing core competencies

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN15	Analysis of Production and Operation Decisions			Exam	5
Course type	Course code	Course language	Timetable information		
Lecture	EEN09GT	English			
Practice	GEN09GT	English			

The course illustrates and explains the operational decisions and their analysis in production and service systems through case studies. It develops individual problem formulating, modelling and solving abilities. Using up-to-date tools (e.g. mathematical programming for resource allocation, simulation for queuing models), complex production and operations management decisions are analysed and supported. Through the tasks of a management simulation of a manufacturing company, the students can develop group decision abilities and can use their theoretical knowledge in practice as well.

Subject code	Subject name			Requirement	ECTS credit
BMEGT20MN49	Data Analytics			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Lecture	EEN06GT	English			
Practice	GEN06GT	English			

Subject code	Subject name			Requirement	ECTS credit			
BMEGT20MN60	Today's Quality Management Challenges			Mid-semester mark	3			
Course type	Course code	Course language	Timetable information					
Lecture	EEN02GT	English						
Subject code	Subject name			Requirement	ECTS credit			
BMEGT20MN63	Risk and Reliability			Exam	3			
Course type	Course code	Course language	Timetable information					
Lecture	EEN03GT	English						
The issues of reliability management play an important role in engineering, technology management and have great impact on financial questions. During the course we introduce such financial and reliability methods which are connected with the construction and the operation of processes and products.								
Subject code	Subject name			Requirement	ECTS credit			
BMEGT20MN66	Production Organisation			Mid-semester mark	5			
Course type	Course code	Course language	Timetable information					
Lecture	EEN03GT	English						
The course introduces the basic operating mechanisms of manufacturing and service processes. It focuses both on the design of production and service systems and on the methods of efficient operation. Besides providing detailed overview of the conventional push material flow methods (MRP), the modern pull flow systems (JIT, TOC) are introduced as well. The objective of the course is to understand the advantages and disadvantages of the different production types taking into consideration the nature of the product, the market and economic conditions.								
Subject code	Subject name			Requirement	ECTS credit			
BMEGT20MN67	Risk and Reliability			Mid-semester mark	3			
Course type	Course code	Course language	Timetable information					
Lecture	EEN02GT	English						
The issues of reliability management play an important role in engineering, technology management and have great impact on financial questions. During the course we introduce such financial and reliability methods which are connected with the construction and the operation of processes and products.								
Subject code	Subject name			Requirement	ECTS credit			
BMEGT301004	Economics I.			Mid-semester mark	2			
Course type	Course code	Course language	Timetable information					
Lecture	EEN47BM	English						
This course provides an introduction to the fundamental concepts, theoretical models, and logical structures of economic analysis. Students learn about the functioning of market economies, different types of demand and supply elasticities, the logic of consumer and producer decision-making, firm-level profit maximization methods, and the main forms of market structures. The course also addresses the role of government intervention, models of production factors, and problem-solving methods in microeconomics.								
Throughout the course, students develop the ability to apply comparative static analysis to market models, evaluate economic processes in terms of welfare, analyze the effects of economic policies, and perform basic economic calculations – such as cost-benefit and present value analysis.								
Subject code	Subject name			Requirement	ECTS credit			
BMEGT30A001	Micro- and Macroeconomics			Exam	4			
Course type	Course code	Course language	Timetable information					
Lecture	EEN47BM	English	WED:08:15-10:00; FRI:10:15-12:00					
Objectives By introducing into the basic notions, principles and context of economic base knowledge, as well as into the logics of economic model building, the course enables students to decrypt everyday life economic phenomena and to understand social phenomena in a broad sense.								

Subject code	Subject name			Requirement	ECTS credit
BMEGT30MS07	Economic Analysis of Technology			Exam	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN30VE	English	TUE:08:15-10:00		

#### Objectives

In everyday practice unfortunately a technical and economic solution to a problem is sought separately. In extreme cases professionals of the above areas do not even understand each other or "speak the same language". Within the confines of this subject, we are attempting to combine the knowledge of the two areas, primarily from the economic side. In doing so, we interpret several technical processes (production, innovation, raw material management (costs), etc.) from an economic point of view, highlighting the relevant economic aspects. In addition, we examine the market environment of companies, which has a decisive influence on product sales and revenue developments. Our aim is for future engineers to recognise the economic aspects of their activities, which will certainly facilitate the acceptance of their products.

Subject code	Subject name			Requirement	ECTS credit
BMEGT30N002	Industrial Organization			Exam	6
Course type	Course code	Course language	Timetable information		
Lecture	EEN28BM	English	THU:14:15-18:00(QA406)		

#### Objectives

The main objective of the course is to get students acquainted with the basic theories of different market structures and their potential applications to practical problems related to efficiency, welfare, market strategy and regulation. Both the course material and the recommended textbook are accessible to students without a profound maths background (we use simple algebraic models or basic game theory), but we assume that the students are already familiar with the basic concepts and tools of microeconomics.

Subject code	Subject name			Requirement	ECTS credit
BMEGT411099	Philosophy and Art			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			
Practice	GEN01BM	English			

TAD (English): <https://edu gtk.bme.hu/local/tad/tad.php?id=1425>

Subject code	Subject name			Requirement	ECTS credit
BMEGT418959	Logic and Argumentation			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			

TAD (English): <https://edu gtk.bme.hu/local/tad/tad.php?id=1439>

Subject code	Subject name			Requirement	ECTS credit
BMEGT419709	History of Science			Exam	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			

TAD (English): <https://edu gtk.bme.hu/local/tad/tad.php?id=1413>

Subject code	Subject name			Requirement	ECTS credit
BMEGT41A001	Philosophy			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			

TAD (English): <https://edu gtk bme hu/local/tad/tad.php?id=1448&version=20222301>

Subject code	Subject name			Requirement	ECTS credit
BMEGT41A010	Techniques of negotiation and presentation			Mid-semester mark	2

**Course type** **Course code** **Course language** **Timetable information**

Lecture EEN01BM English

TAD (English): <https://edu gtk bme hu/local/tad/tad.php?id=1435>

Subject code	Subject name			Requirement	ECTS credit
BMEGT41A011	Social Animal: Human Being and Society			Mid-semester mark	2

**Course type** **Course code** **Course language** **Timetable information**

Lecture EEN01BM English

TAD (English): <https://edu gtk bme hu/local/tad/tad.php?id=1436>

Subject code	Subject name			Requirement	ECTS credit
BMEGT41BX4T001-00	Ethical Decision and Action			Mid-semester mark	3

**Course type** **Course code** **Course language** **Timetable information**

Lecture EEN01BM English

TAD (English): <https://edu gtk bme hu/local/tad/tad.php?id=2425>

Subject code	Subject name			Requirement	ECTS credit
BMEGT41M410	Epistemology			Exam	3

**Course type** **Course code** **Course language** **Timetable information**

Lecture EEN01BM English

TAD (English): <https://edu gtk bme hu/local/tad/tad.php?id=535>

Subject code	Subject name			Requirement	ECTS credit
BMEGT42A022	Environmental Evaluation and Risk Management			Exam	3

**Course type** **Course code** **Course language** **Timetable information**

Practice GEN40BM English TUE:10:15-12:00(QA240)

The aim of the course is to provide knowledge to students about the theoretical background, methods as well as Hungarian and international experiences of environmental valuation and the theoretical background, main fields and measures of environmental risk management.

1. Evaluation and monetary valuation methods. Environmental impact assessment and its limitations. Ecological footprint calculation

2. Advantages and areas of application of monetary valuation. WTP and WTA. Ecosystem services. Criticism of evaluation

3. Weak and strong sustainability and environmental assessment. Ex ante and ex post evaluation. The total economic value. Why special methods are needed

4. The social discount rate. Cost-benefit and cost-effectiveness analysis. Project evaluation.

5. Cost-based methods 1. Cost-based methods 2. Case studies

6. The declared preference methods 1. The travel cost method

7. The declared preference methods 2. The hedonic price method, the hedonic wage method

8. Cost-benefit analysis and externalities in the transport sector

9. The revealed preference methods 1. Preparation of a questionnaire, steps of conditional evaluation

10. Revealed preference methods 2. Case studies

11.

Relationship between environmental assessment and risk management. Concept and types of risk						
Subject code	Subject name		Requirement	ECTS credit		
BMEGT42A410	Environmental Management		Mid-semester mark	4		
Course type	Course code	Course language	Timetable information			
Lecture	EEN13GE	English	TUE:14:15-16:00(R108); TUE:14:15-18:00(R108)			
The aim of the course is for students participating in the mechanical engineering course to get a comprehensive picture of the most pressing current sustainability related problems and the path leading to the creation of specific technical solutions for them. By integrating the ideology and thinking of sustainable development into engineering training, those who complete the subject have a modern way of thinking, which is essential for future engineering work.						
Introduction, description of requirements. Basics of environmental management, connection to mechanical engineering studies. The environmental crisis. Reasons, driving forces, trends, economic actors. The economic/environmental economics foundations of sustainability. Management of market failures - environmental policy instruments. Basics of resource management. Indicators describing development, footprint-type indicators, environmental performance evaluation. Environmental factors and effects, the basics of industrial ecology. The concept of environmental risk and eco-design. LCA. ISO 14001, EMAS. Auditing, eco-labelling and sustainable consumption. Environmental conflicts and their corporate management. Climate change and energy management. The relationship between companies and climate change.						
Subject code	Subject name		Requirement	ECTS credit		
BMEGT42M104	Sustainable Environmental and Natural Resource Management		Exam	5		
Course type	Course code	Course language	Timetable information			
Lecture	EEN26GT	English	WED:12:15-16:00(QB104)			
The course unit aims to introduce students to the fundamental environmental and natural resource based problems that our contemporary society must face. Starting out from the economic basics, through a review of case studies to future-conscious decisions, students will gain an insight into environmental and natural resource economics. It is the objective of the course to empower students to understand the global events related to sustainable development and climate change, and to afford them the capability of taking fair, balanced and socially beneficial decisions.						
1.	Visions of the future. The economic approach in managing resources. Evaluating trade-offs, cost-benefit analyses and decision-making tools.					
2.	Valuing the environment: economic reasons and methods. Dynamic efficiency and sustainable development.					
3.	Depletable resource allocation. Energy: from depletables to renewables. Recyclable resources.					
4.	Replenishable but depletable resources. Economic questions of land use.					
5.	Agriculture and food security. Forests.					
6.	Common-pool resources					
7.	Economics of pollution control.					
8.	Stationary source air pollution. Mobile source air pollution.					
9.	Climate change. Water pollution. Toxic substances and environmental justice.					
10.	The quest for sustainable development. Population and development. Visions of the future revisited.					
Subject code	Subject name		Requirement	ECTS credit		
BMEGT42M105	Environmental and Regional Politics of the EU		Mid-semester mark	5		
Course type	Course code	Course language	Timetable information			
Lecture	EEN16GT	English	MON:12:15-16:00(QB105)			
To present the role and history, main elements and changing set of tools as well as present practices and principles of the environmental and regional policy of the European Union.						
1.	The content, basic goals, and relationship of regional policy with environmental policy and sectoral policies. The development of regional policy in individual European countries. Regions, regionalization, regionalism, regional					

identity.

2.

Stages and goals of European regional policy in individual countries. Grouping of countries according to the objective system of their regional policy. Grouping of countries from the point of view of regionalization.

3.

Concept and types of region. The necessity, early history and instruments of Community regional policy.

4.

The effects of the 1973 and Mediterranean enlargements. The 1988 reform of the Community regional policy, its basic principles. The NUTS system.

5.

Changes in the goal and instrument system of the cohesion policy in the 1990s.

6.

Antecedents and effects of the 2004 enlargement. Current issues and possible future development directions.

Evaluation of regional policy.

7.

The fundamental elements of the approach to the examination of contemporary environmental problems: complexity and globality. Frameworks for international environmental thinking and action: cooperation within the UN. The most important stages of the cooperation were in the 1970s and 1980s.

8.

Activities of the UN World Commission on Environment and Development. The strategy of sustainable development. The UN II. World Conference on Environmental Protection. Rio documents.

9.

UN III. World Conference on Environmental Protection (2002. Johannesburg). International environmental protection cooperation in the XXI. at the beginning of the century.

10.

Chronology of the development of the European Union's environmental policy. The reactive phase of the Community environmental policy (1957-1987) - the Community I-III. Environmental Protection Action Program (1973-1986).

11.

The role of the Single European Document (1987), the proactive nature of environmental policy. ARC. Environmental Action Program (1987-1992). The EU's Fifth Environmental Action Program (1993-2000) - towards sustainability. Goals and means. Groupwork.

12.

VI. Environmental Action Program (2001-2010). The "integrative environmental protection" approach, the so-called Cardiff process.

13.

VII of the EU Environmental Protection Action Program (2013-2020). The system of environmental regulation in the EU, comparison with domestic practice.

14.

Domestic harmonization of EU environmental legislation.

Subject code	Subject name		Requirement	ECTS credit
BMEGT42M111	Sectorial Sustainability Studies		Mid-semester mark	5
Course type	Course code	Course language	Timetable information	
Lecture	EEN19GT	English	MON:10:15-14:00(QB104)	

The aim of the course is to provide knowledge to students about the possibilities of integrating sustainability aspects in some economic sectors. The aim is to acquaint students with the methods of sustainability analysis of current policies and the results of the analyses. During the course, the environmental evaluation methods and their sectoral applications are presented in an overview.

1.

The course's purpose, theme, and system of requirements. Sectoral policies of sustainability

2.

The policy of corporate application of CSR

3.

Sustainability interpretation possibilities, concepts, practical problems

4.

Domestic and international examples of sustainability strategies

5.

Examination of alternative vehicle technologies

6.

Sustainable rural development policy

7.

Integrated water management

8.

Smart cities

9.

Sustainability analysis of current domestic and EU transport policy

10.

Policy background of the hydrogen economy

Subject code	Subject name		Requirement	ECTS credit
BMEGT42M400	Environmental Economics		Mid-semester mark	2

Course type	Course code	Course language	Timetable information
Lecture	EEN13EO	English	WED:14:15-16:00

The aim of the course is to acquaint students with the theoretical and practical application of environmental economics, sustainability, and the European Union and Hungarian system of environmental regulation policy.

1.

The characteristics of contemporary environmental problems /complexity and globality/, the need for their "treatment", essential techniques and methods (small-regional environmental crisis management, regional economic-ecological correlations)

2.

The specific form of movement of natural and economic systems, the open chains of the economy and the possibilities of closing them.

3.

The contemporary characteristics of the relationship between the environment and the economy, the previous global strategies and their criticism. Concept, levels, dimensions and indicators of sustainable development. Environmental economic criticism of traditional macroeconomic indicators, shortcomings of GDP-type indicators. Presentation and critical analysis of the new type of macroeconomic indicators.

4.

Possible methods of economic evaluation of the environment, methods from an environmental point of view of products-technologies-processes, life cycle from an environmental point of view of products-technologies-processes (LCA analysis). Grouping of metrics (indicators), PSR and DPSIR models.

5.

Interpretation of the concept of externalities in environmental economics, grouping of external effects. Characteristics of environmental processes (referring to infrastructure planning).

6.

The Pareto optimum, the optimal level of externalities. Environmental damage, environmental protection costs (case study).

7.

Pollution chain model (typification of damage – intervention options).

8.

The necessity of environmental regulation /internalization of externalities/ and its appearance in economic theories /Pigou tax or support, illustration of the Coase theorem, its shortcomings/. The possibility of complex technical-economic regulation of the management of externalities (industry case study).

9.

The purpose, system and most important tools of environmental regulation, with particular regard to the connections between direct, economic and management type regulation. Contemporary domestic and international - primarily European Union - practice of environmental regulation.

10.

Basic principles, characteristics, essential techniques and methods of environmental management (e.g. eco-marketing)

Subject code	Subject name		Requirement	ECTS credit
BMEGT43A002	Sociology		Mid-semester mark	2

Course type	Course code	Course language	Timetable information
Lecture	EEN01ER	English	TUE:16:15-18:00(E201)

This course will give students an introduction to sociology by discussing a subject that concerns all of us: the global financial crisis and the ensuing Great Recession (or Slump) whose dire consequences continue to affect the world economy to this day. The objective is to equip students with the tools required to make sense of this crisis in its complexity. A further consideration, specific to engineering and economics students is that a sociological study of the Great Recession provides valuable insights into the social determinants of innovations, most prominently technological and financial. Learning about these issues will also help them develop a basic understanding of late capitalism. They will find that the major subjects in sociology like power, cultural values, violence, symbolic goods, anomie, collective action, etc. touch upon things that profoundly impact our lives without us being aware of their implications. The craft of sociology is to depart from conventional notions by asking hard questions about these

things using the methods of rational inquiry.

Subject code	Subject name			Requirement	ECTS credit
BMEGT43A044	Sociology for Architects			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01ER	English	WED:14:15-16:00(E201)		

The course aims at giving an insight for the students into the nature of major social phenomena by demonstrating their main characteristics and their key interpretations in social sciences through the standard as well as the most up-to-date frameworks, methods and results with a clear and distinct focus on urbanisation and urban affairs. Major themes discussed during the course are Modernisation, Society and People, The Social Perspective, The Foundation and Construction of the Society, Social Stratification, Economy and Society, Community and identity, Social Institutions, Transformations of the Society, Globalisation, Urbanisation and Society, Metropolis and urban changes, Urban space and place.

Subject code	Subject name			Requirement	ECTS credit
BMEGT43M302	Local Development and Social Policy			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Lecture	EEN01ER	English	THU:14:15-16:00		

The aim of the course is to introduce students into the socio-political and institutional framework and basis of local development. We will examine the economic, political-governmental and institutional and cultural factors, their effect on local decision making, relations between the various levels of territorial/regional governmental decision making as well as examine the most important policy areas in EU context. We will apply a comparative, interdisciplinary and sustainable local development approach with introducing international case studies from various regions and countries and widen the scope to interdisciplinary subjects and topic in the field of sustainable local/urban development, such as community governance, participatory decision making, social capital, socio-cultural innovation, social economy and social enterprises, urban renewal, urban green, sustainable water management and energy usage, sustainable rural communities, urban-rural coexistence and regional development etc...

Subject code	Subject name			Requirement	ECTS credit
BMEGT43V104	Popular Music			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01ER	English	WED:10:15-12:00(E201)		

The aim of the subject is to provide an introduction to the field of popular music studies, covering its most important topics and approaches with the help of literature and musical examples. It examines the connections between music and society, communities, identity, locality and globalization, as well as power; the relationship between music as an industry and changes in technology; and offers insight into the field of popular music analysis, which requires specific methodologies. It deals with approaches to the history of popular music, as well as the organization and social embeddedness of musical genres. To complete the course, no prior musical training or knowledge of music theory is required, only a basic interest in popular music and society.

Subject code	Subject name			Requirement	ECTS credit
BMEGT51V118	Analysis of Pedagogical Problems in the Light of International Films			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Practice	GENGT03 Dr. Kattein-Pornói R.	English			
Practice	GENGT01 Dr. Anafinova Saule	English			

The aim of the course is to examine teaching and learning by learning about and analyzing the different problem situations in different societies. During the semester, four film works will be presented, which, after admission, must be interpreted and analyzed on the basis of specified criteria. The aim of the study is to explore the life situations of students and teachers living in different cultures, to get to know the situation and actors of education, and to compare social realities. Cinematic productions can be changed every six months according to the objectives.

Subject code	Subject name			Requirement	ECTS credit
BMEGT52A002	Psychology			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			

Human cognition: Sensation: sensory systems, vision, hearing, the chemical senses, somatic senses and the

vestibular system. Perception: organising the perceptual world, theories and illusions. Attention, focussed and divided attention. Memory: three stages of memory: sensory, short-term and long-term. Some phenomena of memory: mnemonics, peg word system, interferences. Thinking: human information processing system. Decision making and problem solving. Mental abilities, intelligence and creativity, cognitive styles. Learning, classical and instrumental theory of conditioning. Cognitive processes in learning: insight, latent learning and cognitive maps. Social learning. Motivation: Basic concepts of motivation. Work and motivation: achievement, satisfaction and procrastination. Emotion, emotional intelligence (Goleman). Stress and coping system, some stress-coping programmes. Type A behaviour. Personality: Studying personality (tests), psychodynamic (Freud, Jung), behavioural, and phenomenological (Rogers, Maslow) approaches. The individual in the social world: Some basic sources of social influence, social perception, first impressions, group stereotypes and prejudice, attribution theory. Attitudes and persuasion. Group influences and interpersonal behaviour. Communication: assertiveness, social skills in communication.

Subject code	Subject name			Requirement	ECTS credit
BMEGT52BX4T000-00	Ergonomics - Human-centered Design			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Lecture	EEN01GT	English			

The aim of the course is to introduce the fundamental principles of ergonomics and raise students' awareness of the role of human factors in engineering design. Students will learn how products and the physical environment influence efficiency, safety, and well-being.

Subject code	Subject name			Requirement	ECTS credit
BMEGT52MN43	Leadership and Organizational Psychology in Practice			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Lecture	EEN01GT	English			

Subject code	Subject name			Requirement	ECTS credit
BMEGT52V100	Fashion and the Psychology of Advertising			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN01BM	English			

The course aims to have a look behind the scenes of the colorful and glamorous world of fashion and advertising. What we see at first glance is a huge industry where millions of professionals are pushing the machinery to play upon our instincts. We shall study the methods, reviewing the role of public relations, sales promotion, the role of the brands, and the templates and stereotypes used in the different media. The vast amount of knowledge piled up by behavioral sciences will help us answer the question why our basic instincts to imitate can be used and abused. Why is it that we are ready to spend billions on shampoo, new clothes, junk food, gadgets ... etc. hoping to buy identity. We will also reveal that the very nature of the social animal - the group - plays an even more decisive role in our preferences and purchases – introducing a variety of approaches from the basic theories of fashion (trickle down, cascade, herd behavior) to network theories.

Subject code	Subject name			Requirement	ECTS credit
BMEGT52VVV1000-00	Applied Behavior Science			Mid-semester mark	3
Course type	Course code	Course language	Timetable information		
Practice	GEN01GT	English			

Subject code	Subject name			Requirement	ECTS credit
BMEGT55A001	Business Law			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EEN19BM	English	MON:10:15-12:00		

The aim of the course: Characteristics of the Anglo-Saxon and continental systems of business law. The development of the system of the Hungarian business law. Basic legal institutions of the state to manage the economy. Organisations and enterprises as the subjects of law: conceptional questions. International models of company law. The development of the Hungarian company law. General rules of the Hungarian Company Act. Internal organisation of companies. The law of company registration, the registration proceedings and the company registry. Companies with a partnership profile. Companies limited by shares. Concept and types of securities. Competition law. EU directives and regulations on companies and competition: their execution in the Hungarian law.

Subject code	Subject name		Requirement	ECTS credit
BMEGT55MN02	Economic Law of the EU		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Lecture	EEN11GT	English		
<p>The European Union is one of the world's largest economies and one of most important actors of global trade. The course gives a comprehensive overview of the European Union's economic law and policy, focusing on issues of economic integration, internal market, economic crimes, corporate compliance activities and the regulation of new digital technologies.</p> <p>The course's topics are divided into three sections:</p> <ul style="list-style-type: none"> <li>- brief introduction into the law and operation of the European Union – historical and economic background, as well as institutional framework, legal order, sources of law;</li> <li>- economic law and policy in domestic matters – the rules and operation of the internal market, based on the free movement of persons, goods, services and capital;</li> <li>- economic crimes in a wider sense, corporate compliance activities, new digital technologies and the law.</li> </ul>				