## **CEEPUS COURSES – FACULTY OF ENGINEERING 2018/2019**

Course Code	
Module	
Title:	Data and information visualization
Teacher:	György HAMPEL
Contact:	hampel@mk.u-szeged.hu
Level	BSc (minimum 5 students, maximum 20 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	The aim of the course is to give an overview of human and computer aided information processing and visualization.
Module Subject	Human information processing. Statistical data and information visualization using computer applications. The types of data and information. The use of different chart types. Representation of relationships between data. Infographics.
Number of Credits	4
Course Code	
Module	
Title:	Cross-border Cooperation
Teacher:	Andrea SZÉKELY
Contact:	szekely@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	The course introduces the basic knowledge about border theory and applied regional policy. The focus will be mainly put on the regional policy of the European Union, its programs and their effects on the border zones in Europe. In addition, case studies will be demonstrated.
Module Subject	The European space, Macrostructures in Western and Eastern Europe, Definitions of border, Border theories, Border regions in Europe and in Hungary, Cross-border agglomerations, Touristic aspects of borders
Number of Credits	4
Course Code	
Module	
Title:	Geography of Hungary
Teacher:	Andrea SZÉKELY
Contact:	szekely@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	It will be an introduction to the geography of Hungary. Physical and human geography point of view will also be considered. The students will learn the regional geography of Hungary, they will be able to find important natural and cultural attractions in the country.
Module Subject	Overview of Hungary, Northern Hungary, Northern Great Plain, Southern Great Plain, Southern Transdanubia, Western Transdanubia, Central Transdanubia, Central Hungary.
Number of Credits	4
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Course Code	

Module

Title:	Tourism Management
Teacher:	Andrea SZÉKELY
Contact:	szekely@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to show the business functions applied to tourism and management issues specific to tourism.
Module Subject	The structure of the tourism and travel industry. Organizational behavior in tourism. HRM in tourism. Marketing in tourism. Strategy in tourism. Quality and yield management. Visitor attraction management. The economic impact of tourism. The accommodation subsector. Tour operators, travel agents. The transport subsector. Cultural and heritage tourism.
Number of Credits	4

Course Code	
Module	
Title:	Cultural Tourism
Teacher:	Andrea SZÉKELY
Contact:	szekely@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
<b>Module Aims</b>	The aim of the course to introduce the special features of cultural and heritage tourism.
Module Subject	The Development of Cultural Tourism in Europe. The Market for Cultural Attractions. The Experience Industry and the Creation of Attractions. The Cultural Attraction Distribution System. Case Studies form Europe: Maastricht, Glasgow, Budapest, etc.
Number of Credits	4

Course Code	
Module	
Title:	Organization and Logistics of Tourism
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce European tourism. We focus on Central and Eastern European part of the continent. To know some rules and financial aspects. Students plan a journey and make a tourist guide for travel agencies and a short film.
Module Subject	Europe and tourism, The history of tourism in Europe, The history of modern tourism in Europe, Tourist regions in Europe, The European Union, Tourism policy in the European Union, Regional policy and tourism in the European Union, Tourism and euro, Transportation in Europe and its impact on tourism, Environmental and social concerns in European tourism, Business tourism in Europe, Marketing Europe as a tourist destination, Tourism in Central and Eastern Europe, New trends in the European tourist industry
Number of Credits	4

Course Code	
Module	
Title:	Elements of Marketing
Teacher:	Edina LENDVAI
Contact:	lendvai@mk.u-szeged.hu

Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to learn more about marketing and advertising. Students have exercises how to use marketing tools in practice. Marketing and engineering.
Module Subject	Introduction to marketing and advertising: Jobs and responsibilities, Corporate identity, logos, Branding Finding the customer: Market research, Customer profiles, Data collection, A telephone survey Planning a marketing strategy: The marketing plan, The four Ps, Pricing and positioning strategies Creating ads: The AIDA model for advertising, Working with an ad agency, Advertising channels, Rate sheets Marketing tools: Distribution channels, Types of discount, Types of retailer, Telemarketing, Direct marketing Presenting your public face: Public relations, Websites as a marketing tool, Sponsoring, Effective press releases Marketing through trade fairs: Giveaways, Organizing events, Attending a trade fair
Number of Credits	4

Course Code	
Module	
Title:	Business & Management
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
<b>Module Aims</b>	Aim of the course is to introduce terminology and most important parts of business & management.
Module Subject	Industrial plant, enterprise, enterpriser and manager, subject of business, administration and scientific administration, selection of profession, enterprising and management, market conditions and production factors, production costs, plant sizes, plant location, juridical organization of plants, internal organization of plants, order, supervising and functional authority, centralization and delegation of authority, principles of organization, financial policies and sources.
Number of Credits	4

Course Code	
Module	
Title:	Customer Care
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce in flight and on board services. Students learn about airport technology, passenger safety, ground movements and services during flight. Some practical aspects are also part of the subject.
Module Subject	Introduction to customer care: Customer care success, Customer care business and jobs, Surprising facts about customer care Face to face with customers: Body language, A company visit, Meeting do's and don'ts, At a trade fair, The invisible customer Dealing with customers on the phone: General telephoning, The 'customer care' phone call, What the customers really hear Call center success: Taking an order, Hotline (Troubleshooting), Customer-centered call centers Delivering customer care through writing: Effective letters and emails, Format and informal writing styles, The five Cs of customer care writing, A case study Dealing with problems and complaints: Complaint strategies and policies, The letter of apology, Explaining company policy, Some opinions about complaints and apologies
Number of Credits	4

<b>Course Code</b>	

Module	
Title:	Sales & Purchasing
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce in sales and purchasing in engineering. Students learn about how to buy and sell, manage trade in engineering. Some practical aspects are also part of the subject.
Module Subject	Job and responsibilities: Job titles and tasks, A sales meeting, A sales meeting, A requisition New contacts: At a trade fair, Relationship building, Fellow-up emails Offers: A sales pitch, The AIDA approach to sales, A request for proposal, An offer letter Negotiations: Tips for successful negotiations, A company visit, Negotiating styles, Win-win negotiations Orders: Telephone orders, An online order, A change to an order, Numbers and figures, Contract term and phrases Customer care: Dealing with problems over the telephone and in writing, An online complaint form
Number of Credits	4

Course Code	
Module	
Title:	Economics
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the logistics, basic definitions and terminology. Some practical aspects are also part of the subject.
Module Subject	The General Theory of the Goods. Economy and Economic Goods. The Theory of Value. The Theory of Exchange. 4 Principles of Economics. Use Value and Exchange Value. The Theory of the Commodity. The Theory of Money. Macroeconomics. Case studies and presentations.
Number of Credits	4

Course Code	
Module	
Title:	Logistics
Teacher:	József GÁL
Contact:	galj@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the logistics, basic definitions and terminology. Some practical aspects are also part of the subject.
Module Subject	Introduction to logistics: Setting the scene; Job in logistics; Regular activities Logistics services: Logistics acronyms; Product ranges; 3PL providers; Value-added services Inventory management and procurement: Inventory management; Continuous replenishment; Job advertisements Modes of transport: Transport and handling equipment; Container types, Types of goods Planning and arranging transport: Transport options, Measurements, Quotations Shipping goods: Marking, Loading, Advice of shipment, Shipping instructions Warehousing and storage: Handling equipment, Warehouse areas, Warehousing today Documentation and finance: Documents in foreign trade, Import instructions, Payment methods
Number of Credits	4

Course Code	
Module	
Title:	Business planning
Teacher:	Árpád BENKŐ-KISS
Contact:	benko-ka@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce most frequent methods and parts of Business planning, and financial calculations.
Module Subject	Basics of Accounting, The Balance sheet and Income statement Securities, Financial calculations, Credits, and paybacks, Turnower NPV, IRR, Marketing, Financial ratios, Brake even analysis, Financial calculations- interest and compound interest, Geometric series in financial calculations Depreciation, Risk analysis, Cost Benefit Analysis CBA)
Number of Credits	4

Course Code	
Module	
Title:	Human Resource Management
Teacher:	Sándor NAGY
Contact:	nagys@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the human resource management. Some practical aspects are also part of the Course.
Module Subject	What is HRM? Basics of the HRM. Understanding the logic of the management of the human resources. Challenges and new aspects of the topic. E.g. focusing on engineering aspects, managing the elderly workforce at the BMW car manufacturer, creativity management and its connections to engineering dimensions, complexity management affecting the HRM.
Number of Credits	4

Course Code	
Module	
Title:	Management of Value Creation-based Organizational Competitiveness and Sustainability
Teacher:	Sándor NAGY
Contact:	nagys@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the logic of the competitiveness and the extended interpretation of sustainability in the field of competitive sector.
Module Subject	Understanding the definitional evolution of the notion of competitiveness and sustainability. The content of the value creation-based competitiveness regarding the competitive sector "Engineering the value creation" 7 pillars of the sustainability Strategic aspects of the competitiveness (Blue Ocean Strategy, sustainable competitiveness and how to harmonize the competitiveness and sustainability) Case Studies
Number of Credits	4

Course Code	
Module	
Title:	Strategic Management
Teacher:	Árpád BENKŐ-KISS
Contact:	benko-ka@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the strategy management. Some practical aspects are also part of the subject.
Module Subject	Methodology of strategic planning. The environment of strategy (collecting facts, etc). Strategy formulation (formulation of the target image, selection of target groups, etc.) Strategy implementation. Strategy evaluation and control.
Number of Credits	4

Course Code	
Module	
Title:	Communication of Modern Organizations and Society
Teacher:	Ferenc SZABÓ
Contact:	szabof@mk.u-szeged.hu, szabof55@gmail.com
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,2,3,4,5)
Module Aims	The aim of the course is to give a general knowledge of communication, mass communication, marketing communication, and the different communication activities of modern organizations.
Module Subject	Another topic is to investigate communication from the different points of view in the organizations of modern society. We also deal with the communication between organizations, and the influence of global communication networks, supported by high-tech IT methods. Furthermore, we will discuss what is or what will be the role of direct personal and verbal communication in the communication systems of the future society. Contradictions between the high-level influence of global mass communication systems' messages and the uncountable number of massive personal and individual messages appearing in social media. Will human beings be separated or, in the end, isolated by IT devices? The long-term results of nowadays' communication process may be loneliness and depression? The course will address these questions.
Number of Credits	4

Course Code	
Module	
Title:	Change Management
Teacher:	Ferenc Szabó
Contact:	szabof@mk.u-szeged.hu, szabof55@gmail.com
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,2,3,4,5)
Module Aims	The aim of the course is to cover the basics of change management and to endow the students with the theoretical knowledge and practical skills to plan and implement successful change initiatives in different organizations.
Module Subject	The students will be familiar with the most important theories and models of organizational change. They will get access to the basic principles and the most useful tools of initiating and implementing organizational change. They will be able to realize when change is necessary, will understand how to plan a successful change process, what the most important phases of a change process are. They will be empowered with means to understand

and handle the resistance of employees. They will understand the role of organizational culture in the adaptive or inert nature of different organizations. It will be discussed why some change initiatives fail and others succeed.

## Topics:

- 1. The importance of organizational adaptation, the dangers of inertia, the significance of change management
- 2. External and internal triggers of change, types of organizational change
- 3. Actors and roles in organizational change, characteristics of a good change manager
- 4. The process of organizational change (Kotter's model)
- 5. The phases of organizational change (Lewin's model)
- 6. Reasons of resistance against change and their handling
- 7. Change management tactics and management tools in implementing change
- 8. The effect of organizational culture on the adaptive or inert nature of organizations
- 9. Factors of success and failure in change initiatives

Number	
Credits	

of 4

Course Code	
Module	
Title:	New Ways in Environmental Management and Waste Management
Teacher:	Ferenc SZABÓ
Contact:	szabof@mk.u-szeged.hu, szabof55@gmail.com
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,2,3,4,5)
Module Aims	The aim of the course is to give a general knowledge of environmental management and waste management in details, to survey the global and local results of environmental policy of the last decades, to discuss the remaining problems, for example the influences of overpopulation and climate change, the environmental pollution caused by waste. It is also important to investigate the possible solutions, the new methods and technologies, the technical background of modern environmental protection.
Module Subject	We discuss the different areas of environmental management, for example air and water quality management and soil protection. In the case of the direct protection of these elements, positive processes begin in the local environment, causes indirect changes in the quality of regional and global environment. By now, environmental sciences and industry has developed methods and technologies to solve most of the environmental problems. Why don't we use them? The answer to this question is, or will be solving the most important problems of the next generation. How can we stop the climate change, the overconsumption of the fossil energy sources, how can we use more renewable energy, recycle more solid waste? The course will address these questions.
Number of Credits	4

Course Code	
Module	
Title:	Corporate Finance for Engineers
Teacher:	Brigitta ZSÓTÉR
Contact:	zsoterb@mk.u-szeged.hu
Level	BSc (minimum 5 students)
Termin	fall or spring semester (2 lessons a week) (mark: 1,3,5)
Module Aims	Aim of the course is to introduce the finance, basic definitions and indicators. Some practical aspects are also part of the subject.
Module Subject	Introduction to corporate finance: The role of the financial manager. Separation of ownership and management. Financial markets.  Present Value. Net Present Value. NPV Rule. ROR Rule. Opportunity Cost of Capital. Managers and the Interests of Shareholders.  Valuing Long-Lived Assets. PV Calculation. Short Cuts. Compound Interest. Nominal and Real Rates of Interest (inflation). Example: Present Values and Bonds.  How Common Stocks are Traded? How to Value Common Stock? Capitalization Rates. Stock Prices and EPS. Discounted Cash Flows and the Value of a Business.  Why Net Present Value Leads to Better Investment Decisions than Other Criteria?

Number of Credits 4