



STUDY PROGRAM

UNIVERSITY OF DUNAÚJVÁROS

2024

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Description of the Study Program

Engineering Management BSc										
The higher educational institution responsible for the study program	University of Dunaújváros (Dunaújvárosi Egyetem)									
Identification number of the higher educational institution	FI60345									
Address	1/A Táncsics Mihály utca, 2400 Dunaújváros, Hungary									
Head of the higher educational institution	Dr. habil. István András, Ph.D., Rector									
People responsible for the study program										
The institute responsible for the study program	Institute of Social Sciences									
Director of the institute (name, scientific degree)	Dr. Adrea Keszi-Szeremlei Ph.D, College Professor									
Responsible person for the study program (name, scientific degree)	Dr. habil Mónika Rajcsányi-Molnár Ph.D., College Teacher									
Specializations and the person responsible for the specialization (name, scientific degree)										
Logistics specialisation:	Dr. Lajos Veres Ph.D., College Professor									
Details of the study program										
Entry requirements	 General Certificate of Education or a certificate of secondary school final exam, that certificate, which is required to start a higher educational study program in the home country of the student, The mother tongue of a foreign student is qualified as advanced language exam according to the Hungarian regulations. 									
Level	undergraduate									
Qualification	bachelor (BSc)									
Description of the qualification in Hungarian	műszaki menedzser									
Description of the qualification in English	Engineering Manager									

Duration of study	7 semesters (3 and a half year) full-time program
Credit points to be acquired	210
Educational goals of the study program	The objective(s) of the training is to train engineering managers, who have acquired adequate knowledge of natural sciences, engineering, economics and management in order to be able to resolve IT, financial and human resource related problems of products and services in an integrated manner. Furthermore, they must have in-depth knowledge that is adequate to enable them to continue with their studies in the graduate, master level.
Prerequisite(s) of starting a specialization and the way of classification	To take the Logistics specialisation the student must complete the study requirements of the following subjects until the end of semester nr. 4. DUEN-TVV-122 Enterpreneurship. DUEN-TVV-114 Management DUEN-TVV-219 Operations and Quality Management In the semester determined in the curriculum the Logistics specialisation will be started.
Work placement/Internship	Min 6 weeks in an internship place.
Prerequisitie(s) of issuing the pre- degree certificate (absolutorium)	The university leaving certificate certifies the successful completion of the exam requirements in accordance with the curriculum and the completion of the other study requirements (e.g. physical education) and the collection of the required number of credit points defined in the study and output requirements (except the credit points related to the thesis). This certificate is a proof without qualification and evaluation that the student has fulfilled all the study and exam requirements defined in the curriculum.
Thesis	The thesis research means the solution of a Engineering management problem or the elaboration of a research task on such a special field, on which it can be completed on the basis of the knowledge acquired by the student during the years of his studies with the guidance of the first and second supervisor in one semester. The candidate proves with writing the thesis that he has adequate expertise in the practical use of the factual knowledge that he has learnt, and that he

	is able to do the tasks of an engineering business manager and that he is familiar not only with the course material, but with the related special literature, as well, and he is able to apply that in a value-creating way. Formal requirements: the extent of the thesis must be $40 - 60$ pages.								
Prerequisite(s) of the final exam	The prerequisites of the final exam are the receipt of the university leaving certificate and the thesis accepted for evaluation.								
The final exam	The aim of the final exam is to check and assess the knowledge, skills and abilities required for the obtaining of a certificate on the study program. Students are also expected to prove their competence in applying the acquired theoretical knowledge in professional practice. The final exam consists of defending the student's thesis and an oral exam on the subjects defined in the curriculum (FES1, FES2)								
Subjects of the final exam	 Final Exam Subjects 1 (FES1) (Complex): DUEN-TVV-114 Management DUEN-TVV 111 Human Resource Management DUEN-TVV 216 Management Methods Final Exam Subjects 2 (FES2) (Green Logistic Specialization): DUEN-TVV-212 Basics of Logistics DUEN-TVV-121 Business Logistics DUEN-TVV-121 Business Logistics DUEN-TVV-214 Logistics Management DUEN-TVV-110 ESG approach for businesses 								
Average of the certificate	The average of the certificate should be calculated in the following way: (FE + D + SA)/3. Where (FE) is the mathematical average of the marks of the final exam subjects (FES1, FES2); (D) is the mark awarded for the thesis by the final exam committee; and (SA) is the cumulative average of the study marks weighted with the credits points obtained by the student.								
Qualification of the certificate	excellent 4,51 - 5,00 good 3,51 - 4,50 satisfactory 2,51 - 3,50 pass 2,00 - 2,50								
Preconditions of issuing the certificate	The precondition of the issue of certificate to prove the completion of higher educational								

	studies is the successful final exam.
Language of Training	English
Physical Education	For students participating in full-time training, 2 hours per week are mandatory for a minimum of 4 semesters during the training period.
Study mode	Full time

Required competencies:

The students graduated in Engineering Business Management BSc know

the basic concepts and major correlations of the area of engineering and management;
the science, arts and economic and social (inter)connections of production and supplying processes;

- the principles of operation of organisations;

- the engineering, economical and management like activities in organisations and their inter-relations;

- the knowledge necessary for founding and managing the manufacturing and supplying enterprises;

- the principles and usable results of marginal areas of related fields of science (e.g. sociology, psychology) and engineering and management sciences;

- the requirements of environmental protection, safety engineering, quality assurance, industrial-law protection and consumer protection.

The students graduated in Engineering Business Management BSc can and are able - organise, manage and control technological, production, logistic, quality assurance and information technological processes;

- prepare business plans;

- fulfil decision-preparatory tasks;

- implement innovation strategies;

- manage groups at workplaces;

- manage information;

- fulfil the tasks of human resource management;

- surveying the accountancy system;

- fulfil operational tasks of production management, provide production and supply activities;

- define quality and efficiency indices;

- analyse the competitors, products and the possibilities of bringing products to the market. The graduates of the course have skills for co-operation and making contacts, communication skills, knowledge of foreign languages, have a sense of responsibility, related to the engineering profession; they are quality conscious, and they have evaluation, self-evaluation, analysing and synthesizing skills.

Curricular Web

Course descriptions of the Engineering Management BSc study program

	Engineering Manager BSc.																						
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Subject code	Subject name	Credit	nt	Ľ	1			2	Ţ	3			4		5	5	I		6	Γ	7		Prerequisite
			ш	Т	Р	L	Т	ΡL	. 1	ΓP	L	Т	Р	L	ΤI	P]	L 7	ΓІ	PL	Т	Р	L	<u> </u>
DUEN-IMA-100	Tutorial Mathematics	0	М	0	2	0										1			L			D	-
DUEN-IMA-151	Mathematics 1.	5	Е	1	2	0															Ľ		-
DUEN-MGT-111	Engineering representation	5	М	1	2	0	\Box										1	1	l	L	Ľ	\square	-
DUEN-MUT-151	Engineering Physics	5	Е	1	1	1											L	1					-
DUEN-TKM-150	Legal Knowledge	5	Е	3	0	0										1		1	L			D	
DUEN-TKT-151	Economics 1.	5	Е	1	2	0											1				Ľ		-
DUEN-TVV-122	Entrepreneurship	5	М	1	2	0																\square	-
DUEN-IMA-211	Mathematics 2.	5	М				1	2 0)													\square	DUEN-IMA-151
DUEN-MST-210	Industrial materials	5	М	Ĺ	<u> </u>		1	0 2	2							1		1	L		Ľ	Ú	-
DUEN-MUT-250	Heat and Fluid Dynamics	5	E	L			1	1 1										\perp			Ľ	\square	DUEN-MUT-151
DUEN-TKT-211	General and Business Statistics	5	М	L			1	0 2	2								_	\perp			Ľ	\square	-
DUEN-TKT-217	Principles of Accounting	5	М	L		1	1	2 0)							1	\perp	\perp	\perp	L	\Box	μ	-
DUEN-TVV-220	Business economics	5	М				1	2 0)									\perp	\bot	L	Ľ	\square	-
DUEN-IMA-110	Mathematics 3.	5	М	L		L			(0 3	0					1		\perp			Ľ	\sqcup	DUEN-IMA-151
DUEN-MGT-112	Engineering construction	5	М	L		1				1 2	0					1	⊥	\perp	\perp	L	\Box	μ	-
DUEN-MUA-116	Technology of Structural Materials	5	М	L						1 0	2						_	\perp	\bot	L	Ľ	L	DUEN-MUA-216
DUEN-MUG-152	Mechanics 1.	5	E	L		Ļ			1	1 2	0					1	\perp	\perp	\perp	L	\square	Ш	-
DUEN-MUG-212	CAD	5	М	L					(0 0	3						_	\perp			Ľ	\square	-
DUEN-TVV-114	Management	5	М	L						1 2	0						⊥	\downarrow	\perp	L	Ľ	\sqcup	-
-	Optional course	5	- '									-	-	-							Ľ	\square	-
																							DUEN-MUG-
DUEN-MUG-222	Basics of machine design	5	М									2	1	0									212, DUEN MUC
		1																					152 DUEN-MUG-
DUEN-MUG-25	Production Technology	5	Е	F		T			t		T	2	1	0			-	+	-	1	Η	H	
DUEN-TVV-215	Marketing	5	М		1	Γ					T	1	2	0	ľ		T	T	1	T	Г	Н	-
DUEN-TVV-219	Operations and Quality Management	5	М	t			H		T		T	1	2	0		T	1	Ť	\top	t	Π	Π	-
DUEN-TVV-250	Strategic planning	5	Е	t		T	h		t	1	T	1	2	0	T	Ť	╈	Ť	\top	ſ	Π	Π	DUEN-TVV-114
-	Specialization	20	-	\vdash	F	ſ	h		t	╈	t			1		-	-	t	+	l	Π	Ħ	-
DUEN-ISF-010	Informatics	5	М	t		l	H		t	╈	T			1	0 (0	3	Ť	+	ſ	┍	Π	-
DUEN-TKT-114	Basic of Finance	5	М	┢	 	t	H		t	\uparrow	\mathbf{T}			1	1 2	2	0	t	+	ŀ	Η	H	-
-	Specialization	15	-	F		ſ	h		T	T	T			1	T	T	1.	-1	- 1 -	t	Г	Π	-
-	Optional course	5				l			T	T	T			Ť	T	T	-	- 1-		ľ	Γ	Π	-
DUEN-TGT-214	Ergonomics and health promotion	5	М	F		l			T	T	T			Ť	T	T	1	1 1	2 0	l	Γ	Π	-
DUEN-TVV-090	Thesis-Research Methodology	0	S			l			T	1	T			1	T	T	1	1 (0 0	l	Γ	Π	-
DUEN-TVV-116	Project Management	5	М													I]]	1	2 0				-
-	Specialization	5	-	Γ		Γ			Τ		T					Т	Т	Т	Т	-	-	-	-
DUEN-MUT-110	Environmental protection and energy management	5	М													I	I	T	T	2	0	1	-
DUEN-TVV-091	Thesis writing MMENBSC	15	S						I								I	Ι	T	1	0	0	DUEN-TVV-090
DUEN-TVV-093	Internship MMENBSC	0	S			Γ		Т	Τ	Τ	Γ				Τ	Ι	Τ	Ι	T	0	0	0	DUEN-TVV-091
DUEN-TVV-111	Human Resource Management	5	М											_				Ι	Τ	1	2	0	-
	Number of Theoretical/Practice/Lab classes per we	,		8	11	1	6	7 5	5	49	5	7	8	0	1 2	2	3 3	3 4	4 0	4	2	1	
Total number of classes per week		'			20			18	T	1	8		15		(6	Т	,	7	Γ	7	Ξ	1
	Total credit points			F								2	10										1
	A			F											6 (6	04	4	3 1	1	2	0	
	GREEN LOGISTICS	1												F	1	2	<u> </u>	1	8	Ė	3	- ×	l
	GREENEDGIGTIGG	1		-	20			10		11	0		15	ł	1	0	-	1	5	+	10	_	l
		1			- 20			10 -		- 10			1.5		- 1	0		- 1			10	- 1	1

		GRE	EN LOGISTI	cs																				
			D	Semester - Classes per week																				
Subject code	Subject name	Credit	Requireme	1				2		3		4				5			6			<i>i</i>	Prerequisite	
			ш	Т	Р	L	Т	Р	L	Т	ΡI	, T	Р	L	Т	Р	L	Т	P	Ľ	ΓI	, L		
DUEN-MGT-153	Basics of energy saving and conservation	5	Е												2	1	0						-	
DUEN-TGT-110	ESG approach for businesses	5	М												2	1	0						-	
DUEN-TVV-119	Analysis of Business Cases	5	М												1	2	0						-	
DUEN-TVV-212	Basics of Logistics	5	М												1	2	0						-	
DUEN-MGT-216	Novel techniques of environmental protection	5	М															2	0	1			-	
																							DUEN-TVV-	
DUEN-TVV-120	Enterprise Information Systems	5	М															0	2	0			220,	
																							DUEN-ISF-010	
DUEN-TVV-214	Logistic Management	5	М															2	1	0			-	
DUEN-TVV-121	Business Logistics	5	М																		1 2	2 0	DUEN-TVV-212	
	Number of Theoretical/Practice/Lab classes per we			0	0	0		0	0	0	0 (0	0	0	6	6	0	4	3	1	1 2	2 0		
Total number of classes per week				0 0					0			0			12			8			3			
	Total credit points												40											

2024

Tutorial Mathematics

Carla in a tana ang a	in Hungunun	inaternatika I	eiza.	rkozialo			Level	BSC					
Subject name	In English	Tutorial mat	hen	natics			Subject code	IMA-100					
Responsible Educational	unit name	Institute of Informatics											
Name of the required pre	liminary study						Subject code						
	Study load per	week (in hour	s)		D · ·	G I''	Teaching						
Туре	Theoretical	Practice		Lab		Requirement	Credit	language					
Full time 150/26	per Week 0	per Week	2	per Week	0	Signatura	0	English					
Part time 150/10	per Semester 0	per Semester	10	per Semester	0	Signature	U	English					
Course leader		Name		Dr. Antal Joó	s		Position	associate professor					
Training course aims		Based on the preliminary knowledge assessment, this course is recommended for students studying in the bachelor courses in economics and management, materials engineering, mechanical engineering, business informatics, computer engineering technical management, and in the higher vocational courses in engineering economics, and management. The aim is to acquire basic mathematical knowledge to raise students' mathematical knowledge, skills, and competences to a leve appropriate for the preparation of higher education studies and for the completion o mathematics courses.											
Typical transfer methods		Practice Lab	Clas stud	ssroom exercise lies.	es, s	tudent-prepared	papers, preser	ntations, case					
		vlisc											
Students know the methods and procedures needed to solve mathemat in their field. Possesses the knowledge and understanding of the mather algebraic literacy required for the field of specialisation.AbilityAbilityAbility to apply the mathematical knowledge and activities learned. At the problem-solving methods and procedures learned. Ability to devel their own solution plans in discussions (argumentative debating skills) the mathematical concepts learnt. Ability to organise his/her own lea effectively, to find and use different learning resources (print, electroni AttitudeOpen to learning about and embracing mathematically based, applied developments and innovations related to the field.Autonomy and Responsibility Taking responsibility for your own work and the work of others.													
Short description of the s Forms of student activity	ubject content	The material for the intermediate mathematics exam. Operations with complex numbers. Set theory, the concept of a function. Number sequences, powers, roots, order of operations. Logarithm, solutions of linear and quadratic equations. Solving problems in text. Exercise problems from the numeracy exercise in Engineering Mathematics 1. - Task solving with guidance 60 % - Independent processing of tasks 40 %											

Required reading and availability	 Lay, D. C.: Linear Algebra and its applications, 4th edition, Addison-Wesley, 2012. Stewart, J.: Complex Numbers, Additional Topic to Essential Calculus, 2nd edition, 2013, pp. 1-11. Smith, R. T., Minton, R. B.: Calculus: Early transcendental functions, 4th edition for the complex back 2012.
Recommended readings and availability	Electronic content and learning material in Moodle and/or in Neptun systems.
Description of tasks/measurement procedures to be submitted	-
Description and schedule of the midterm tests	During the semester, full-time and correspondence students write 1 final examination in week 13. The final examination is assessed according to the Examination and Study Regulations.

2024

Mathematics 1.

Subject name		Hungarian		Matematika 1.					Level	А						
		English		Mathematics 1			Code	DUEN(L)-IMA-151								
0																
Responsible education	onal un	it		Institute of Information Technology												
Name of prerequisite	e subjec	rt														
Type		Class hours /	w	eek			FCTS	I anguage of instruction								
Type		Theoretical		Practice	Lab			Requirements	LCID	Language of instruction						
Full time course	150/39	-	1		2		0									
Long distance course	150/15	per Semester	5	per Semester	10	per Semester	0	E (Exam)	5	English						
Teacher responsible	Associate Professor															
				Short description	on	of the subj	ect'	s goal								
				A mathematical theory is introduced to solve quantitative problems in technical												
Educational goal (co	mpeter	icies to be		and other fields.												
acquired)				Education history, development goals												
				Methods of problem solving in the course topics are introduced and ability for												
				students to use these methods are developed.												
				Theoretical	Int	roducing n	oti	ons and metho	ds in lectur	e hall, using blackboard.						
				Teaching in small groups, solving computational and applied												
Typical transfer way	'S			Practice	ex	ercises.		0	U							
			Lab Teaching in small groups, in computer labs.													
			Other													
				Knowledge	-											
				Knowing basics mathematical background and theoretical concepts. Knowing												
				and understanding of the concepts needed in further studies. Basics in applying a												
				computer algeb	ora	system.	1			TT J 8						
Requirements (expre	essed in	educational		Ability												
results)	issee m	concational		Able to use the mathematical methods learned.												
(courts)				Attitude												
				Open-minded f	for	the mather	nati	ical innovatio	n on their fie	eld						
				Autonomy and	d R	esponsibil	itv									
				Responsible fo	r th	eir results	105									
				System of lines	are	austions N	/ at	rices Determi	inants Fige	nvalues eigenvectors						
				Set theoretical	haa	ekoround I	Fiin	ictions of one	variable Ba	usic properties of						
				functions of on	e v	ariable Li	mit	s of functions	and sequen	ces Differential calculus						
				of functions of	on	e variable.	Di	fferentiation r	iles. Mean v	value theorems.						
Brief description of	the sub	ject content		Applications of	f de	erivatives.	[nte	egral calculus	of functions	of one variable. The						
				definite integra	ul. 1	The indefin	ite	integral and it	s properties	. Basic properties of						
				functions of se	ver	al variable	s. E	Differential cal	culus of fur	nctions of several						
				variables.												
				Directed learni	ng	of theoretic	cal	material (10%), Independ	lent learning of						
Forms of student act	ivity			theoretical mat	eri	al (30%), E	oire	ected exercise	solving (30	%), Independent						
	•		exercise solvin	g (30%)				-							
a 1 1			-Faragó, I. et al	l. Iı	ntroductory	C	ourse in Analy	vsis, ELTE,	Bp, 2009.							
Compulsory reading	and its		http://www.cs.	elte	e.hu/~simo	np/	jegyzet_2_for	d.pdf	-							
				-Talata, I.: A G	duio	le to Mathe	ema	atical Analysis	, Dunaújvá	ros, 2007, pp. 1-79.						
				Electronic Stud	ły (Guide.		-	-							
Recommended readi	y	-Smith, R.; Mi	nto	n, R.: Calc	ulu	s, Early Trans	cendental F	unctions, 3rd ed.,								
	McGraw-Hill, 2006															
						iomas, G. E	3.: (Calculus, Add	ison-Wesley	y, New York, 1990.						

	There will be four midterm exams (week 3, 6, 9, 12 for 10 points maximum each)
Description of midterm tests	The midterm exams consist of questions on theoretics and applied problems as
	well. 30 minute is provided to take each midterm exam.

Engineering representation

Nome of the subject		in Hungarian		Műszaki Ábı	ázola	ás	Level	А					
Iname of the st	ibject	in English		Engineering	repre	esentation	Code of	DUEN-MGT-111					
Responsible educational unit			Institute of Technology, Department of Energy and Mechanical Engineering										
Name of the re	quired	prior learnir	ıg										
T				Hours per we	ek			Deminent	Curdit	Language of			
Туре		Theoretic	al	Practice	è	Lab		Kequirement	Credit	education			
Nappali		Weekly	1	Weekly	2	Weekly	0						
Correspondent		Half-yearly	5	Half-yearly	10	Half- yearly	0	F	5	Hungarian			
Teacher respon	nsible fo	or the subject	t	Name		Dr. Gábo	or V	izi	schedule:	Associate Professor			
				Objectives,	deve	lopment	obje	ective					
Training objective of the course				The student s descriptive g complex prol optimal solu should be fa sections. The conventional dimensional	The student should be able to perform any variation of the basic constructions found in descriptive geometry. Recognise the elementary constructions needed to solve various complex problems and be able to determine their correct sequence. Be able to select the optimal solution for a given situation from a range of possible solutions. The student should be familiar with the theory and practice of technical drawing projections and sections. The student should be able to edit technical drawings of machine parts using conventional tools, to read technical drawings. The student should be able to construct dimensional drawings of machine parts.								
Typical delive	ry meth	ods		Practice	proje Sma	ector	vor	rises for up to 25 peop	le sketching	and editing			
				Lab	Sina	n group c		Lises for up to 25 peo	ne, sketening	and cutting			
Educational objective (in terms of learning outcomes)				Knowledge You kno You have methods Basic k manufact Compreh machines Understa units and system cc Ability Performs Ability to Ability to them (us backgrou Attitude Open to I his/her q related to Autonomy a	w the e a co in yc nowl turing aensir s, pov nd, c l elen ompo o ide o plaio o ide ing s ind. learn ualifi o the o the	e terminol ompreher our field. ledge of g technolo we knowle wer tools, characteri nents of r onents use job accorr n, organis ntify rout standard of ing about ications a field. esponsib	logy nsive ogy, edge , me ed. ed. dingge ance ine poper	r, key concepts and the e knowledge of the m achine design prin control procedures a e of the operating prin chanical equipment a nd model the structur nanical systems, the d g to his/her qualification d carry out independe professional problems rations in practice) ag e and the structure are of expertise. Inter-	eories related ain theories a ciples and nd operating p nciples and st nd tools used. re and operati esign and into ons. ent learning. s, to identify, gainst a theor nents in machi- rested in new	to your field. nd problem-solving methods, machine processes. ructural units of the ton of the structural errelationship of the formulate and solve retical and practical ine design related to y methods and tools			
Short description of the subject content				Image plane, coordinate system, projection. Representation of a point, real line and point image. Law of projection and of change of view. Mutual positions of spatial elements. Projections dependent on the positions of a straight line, lines of deviation and intersection. Transversals, notable lines of a plane. True magnitude of the plane, constructions with rotation. Intersection of two planes, angles of inclination, distances. Solving problems with basic constructions. Basic standards of technical drawing design. Theoretical overview of projection systems in engineering practice. Application of views, views. Use of sections and sections. Dimensioning on									

	Theoretical processing with guidance 20 % Theoretical processing with guidance 20 %
Types of student activities	Problem solving with guidance 20 % Problem solving with guidance 40 % Laboratory
	measurements with guidance - Preparation of laboratory reports -
Required literature and contact details	Illustrative Geometry Basic Tasks (Guide and practical exercises, Tamás Zahola)
Required interature and contact details	László Tóth- Tamás Zahola: Mechanical Engineering. Zahra Zahola. Főiskolai Kiadó
Recommended literature and contact	Károly Koffán: 15 lectures. 15 lectures. Főiskolai Kiadó.
details	Koffán Károly: 15 exercises. College notes. College Publishing House.
Description of the tasks to be	
submitted/measurement reports, other	
reporting	
Description and timetable of the	
workshop	

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Engineering Physics

Subject name Hung Engl		Hungarian		Mérnöki fizika	L		Level	А				
		English		Engineering Pl	nys	ics		Code	DUEN(L)-MUT-151			
Responsible educational unit				Institute of Engineering								
Name of prerequisite	e subjec	ct				-						
T		Class hours /	w	eek				D · · ·	ECTO	т с. ,		
Type		Theoretical		Practice		Lab		Requirements	ECIS	Language of instruction		
Full time course	150/39	1	1		1		1					
Long distance course	150/15	per Semester	5	per Semester	5	per Semester	5	E (Exam)	5	English		
Teacher responsible	for sub	oject		Name		Dr. Miklós	зH	orváth	Position	College Professor		
		<u></u>		- To understan	d a	nd learn th	еp	principles of pa	article mech	anics, electricity,		
Educational goal (co	mpeter	ncies to be		- fluid and gas	me	chanics. th	neri	modynamics.	optics, quan	tum mechanics		
acquired)	mpeter			- the preparation	on	of the BSc	lev	vel in Physics a	and other rel	lated subjects.		
				Theoretical	Int	roducing n	oti	ions and metho	ods in lectur	e hall, using blackboard.		
Typical transfer way	'S			Practice	Te ex	aching in s ercises.	ma	all groups, solv	ving comput	ational and applied		
				Lab								
				Other								
				Knowledge								
				Students will								
				know the basic	tei	ms of kier	nat	ics, axioms of	mechanics			
				understand the effect mechanisms of mechanics,								
				know the basic penomena of fluid dynamics, Archimedes' principle,								
Requirements (expre	essed in	educational		know the basics of thermodynamics.								
results)				Ability								
				They are able to use the obtained skills even few years later, in real situations								
				Attitude								
				Open-minded for the mechanical innovation on their field.								
				Autonomy and Responsibility								
				Responsible for their results.								
				Kinematics, axioms of mechanics, basic equation of dynamics, work, energy,								
				power, linear momentum, and collisions, oscillatory motion, simple harmonic								
				motion, damped oscillation, forced oscillation, resonance.								
				Basic phenomena of fluid dynamics, buoyant forces, Archimedes' principle,								
				continuity equation, Bernoulli equation.								
				Thermodynamics, thermal expansion, work and heat, specific heat, latent heat,								
Brief description of	the sub	ject content		calorimetry, thermodynamic processes, First Law of thermodynamics, kinetic								
				theory of gases, Second Law of thermodynamics, entropy and disorder, energy								
				conservation.								
				Electricity elec	tro	statics, ele	ctri	ic current, resi	stance, Ohm	i's law, network		
				analysis, magn	etic	c field, elec	ctro	omagnetic indu	ction, alterr	nating current circuits.		
				Optics, geomet	tric	optics, pro	ppa	gation of light	. Interference	e of light, single-slit		
				diffraction, dif	frac	ction gratin	g,	photometry. L	aboratory p	ractices.		
				- to understand	1 ar	nd learn the	e su	ibjects of the p	presentation	making notes and using		
				the electronic of	cou	rse book 40	0%					
Forms of student activity				 executing the 	e la	boratory pi	act	tices 20%				
			 problem solv 	ing	session 20)%						
				- solving tests 20% }								
Compulsory reading	and its	availability	-	- Alvin Halper	m:	Beginning	Ph	ysics I-II				
Compulsory reading and its availability				- SHAUM OUTLINE SERIES McGraw- Hill, ISBN 0-07-025653-5)								

	- Daniel Oman- Robert Oman: Physics for the Utterly Confused (McGraw- Hill
Recommended reading and its availability	Companies, ISBN: 0-07-048262-4) Daniel Oman- Robert Oman: How to solve
	Physics Problems (McGraw- Hill Companies, ISBN: 0-07-048166-0)

2024

Legal knowledge

Subject	In Hungarian		Jogi alapismerete	ek				Level	А					
name	In English		Legal knowledge	e			Code	DUEN-TKM- 150						
Subject cod	e								•					
Responsible	e educational u	ınit	Institute for Social Sciences Department of Communication and Media Science											
Name of M Preliminary	andatory Study			-										
Number of	Lassons								I anguaga of					
Number of	Theoretical		Draatiaa		Lab		Requirements	Credits (ECTS)	Language of Education					
			Practice		Lao	1			Education					
Full-time	39	3		0		0	E	5	English					
Correspond ence	150/ 15	15		0		0	(Exam)		0					
Teacher res	ponsible for th	ne						D	College					
course			Name		Dr. habil Ors	olya Falu	IS	Position	Professor					
			The secol of the s			41 4			1 : II					
			I he goal of the c	ours	se is to introdu	ice the ter	rminology of la	w and the rule of	law in Hungary,					
Educational	acala		in the European	Unic	domental Levi	n internat	honing perspective	ve, as well. Stude	nts will learn the					
Educational	goals		principals of the	Fun	damental Law		basics of public		1 Hungary, in					
			the EU and the c	oun	ries of the int	ernationa	l community. I	ney should be ab	le to understand					
			laws and apply the principle rules regulating business life.											
			Lecture In a classroom with the use of projector or computer in each lecture.											
Typical deli	ivery methods		Practice In a classroom with the use of projector or computer in each seminar.											
	-		Lab											
			Knowledge											
			Students know:											
			the types, terminology and main principles of law,											
			how to understand and apply rules,											
			how public administration works,											
			how legal entities are established and registered,											
			the content of basic contracts.											
			Ability											
Daquiramar	ts (avprassed	in	Students will be able to:											
learning	its (expressed	111	find, understand and apply law,											
outcomes/c	omnetencies to	o he	see the structure	of la	ıw,									
acquired)	sinpeteneies a	0.00	establish and operate a legal entity,											
acquirea)			create basic contracts.											
			Attitude											
			They should be o	pen	-minded, unp	rejudiced	and creative to	find the appropri	ate legal					
			solution for certa	un c	ases.									
			Autonomy and re	espo	nsibility									
			They should use	lega	l jargon prop	erly and t	be able to find a	ind explain the ap	propriate law					
			alone. They should be a should be should be should be a should be a should be a should be	lla r	ecognize lega	These sha	s and exert a re-	view concerning t	hem with					
			correct application of legal terms. They should understand the system of public											
			The definition of		e aware of the	of low T	The avatam of la	polisidility.	lamantal Law of					
Driaf dasari	ntion of the av	high	The definition of	law	and the rule	or law. I	ational reference	gai sources. Fund	and principles					
content	ption of the st	ibject	of public admini	etrot	ion Bureaucr	and the fi	concept of legg	luni. The concept	and principles					
content			companies and c	omr	any registrati	on system	a Basic types of	if economic contr	acts					
			Frontal work 30	%	uny registrati	on system	n. Dasie types 0							
Activity for	ms of students		Individual or gro	_{יע} י מווה	vork: 35%									
Activity forms of students			Test: 15%	чр `	, ora, 0070									

	Communication situation exercises: 20%
	The Fundamental Law of Hungary (25 April 2011)
	(http://hunmedialaw.org/dokumentum/151/THE_FUNDAMENTAL_LAW_OF_HUNGAR
Compulsory reading and its	Y.pdf)
availability	Charles Szypszak: Understanding Law for Public Administration
	(http://samples.jbpub.com/9780763780111/80111_FMxx_Szypszak.pdf)
	Materials on MOODLE
	Sources and Scope of European Law
Recommended reading and its	(http://www.europarl.europa.eu/ftu/pdf/enFTU_1.2.1,pdf)
availability	Saylor Academy, 2012: Law for Entrepreneurs
	https://saylordotorg.github.io/text_law-for-entrepreneurs/
Hand-in Assignments/	On 7th week MIDTERM ESSAY,
measurement reports	On 13th week presentation.
Description of midterm tests	According to the predetermined items.

2024

Economics 1.

	In Hungarian	Közgazdaságtan 1.						А				
Subject name In Englis		Economics	1.	Code	DUEN-TKT- 151							
Subject code	•	DUEN-TKT- 151										
Pasponsible advestional unit	+	Institute for	r Social	Science	es							
Responsible educational uni	ι	Department	of Eco	nomics								
Name of Mandatory Prelimi	nary Study											
Number of Lessons						Paquiraments	Credits	Language of				
	Theoretical	Practice		Lab		Requirements	(ECTS)	Education				
Full-time 150/39	1		2		0	Е	5	English				
Correspondence 150/15	5		10		0	(Exam)	5	English				
Teacher responsible for the c	course	Name		Dr. Mo	hamad S	Saleh	Position	Adjunct Professor				
Educational goals Typical delivery methods	This course theory. The on the decis macroecono interest rate: this course v to decision n of the range tools that we issues. Theoretical Practice	is an ir course ion ma omics, v s, gove will intr making of beh e use to	troducti is split l king of i vith focu rnment s roduce y that app aviors th analyze In a cl each lo In a cl each s	onomic concepts a the study of micro al consumers and f ggregate level eco g, among others. Pe e "economic way of personal decisions. omists investigate, nomy, and apply t with the use of pr	Ind basic economics economics and onomic quest erhaps most of thinking, It will: giv introduce y hese tools t ojector or conocident	onomic , which focuses stions such as important, " an approach e you an idea you to the basic o public policy omputer in omputer in						
		Lab										
Requirements (expressed in outcomes/competencies to b	Students as potential Economist know: the types, terminology and main principles of Economics basic concepts in Economics the steps of analysis in Economics Ability Students will be able to: carry out basic analysis formulate a synthetic relationship carry out adequate evaluation activities Attitude - Openness to authentic mediation and transmission of the overall mindset a the essential characteristics of practical operation of the profession. - Desire for continuous self-education in the field of economics. Autonomy and responsibility In professional questions, the students can play the role of a decision-maker and are able to solve problems alone. They can tackle problems as responsib persons, i.e. in a certain situation, they can decide if there is a need to coope											
Brief description of the subj	The science of economics. Introduction to economic thinking. Macro- and microeconomics. Positive and normative approach to economics. The basic concepts of economics. Coordination mechanisms in the economy. The market and its basic concepts. The operation of the market and price mechanisms. The market balance. The agents of mixed economy. The motivations, income and expenditures of household. The management of business organizations.											

	Production factors and their markets. The concept of national economic
	performance, its most important statistical indicators. The concepts, conditions
	and measurement of economic growth. Economic development and sustainable
	growth. The concept and functions of money. The basic categories of the labor
	market. The state and the market economy. The role and functions of the
	government. Globalization, international trends and issues of the global
	economy.
	Guided learning 17%
	Individual learning 17%
Activity forms of students	Guided task completion 17%
	Individual task completion 49%
	Samuelson, Paul Anthony - Nordhaus, William D. Economics (2009) Mcgraw-
Compulsory reading and its availability	Hill Publ.Comp.
Compulsory reading and its availability	Handouts from the lecturer
	Materials on MOODLE
	Mankiw, Gregory Principles of Economics (2007) Sixth Edition, by Mason,
	Ohio: Thomson South-Western
Recommended reading and its availability	Begg, D., S. Fischer and R. Dornbusch Economics (2002) -7th Edition-
	(McGraw- Hill)
	Moffat, Mike: Online Microeconomics Textbook.
Hand in Assignments/massurement reports	Preparation and presentation of home assignments on pre-determined topics of
Hand-III Assignments/ measurement reports	micro and macroeconomics
	The test usually lasts for one hour and covers everything taught up to the date
Description of midterm tests	of test. The question paper will consist of multiple choice questions and short
	essay questions.

2024

Entrepreneurship

	In Hungarian		Vállalkozástan	Level	А							
Subject name	In English		Entrepreneurship	Code	DUEN-TVV- 122							
Subject code												
	•,		Institute for Social Sc	eien	ces							
Responsible educational un	10		Department of Manag	eme	ent and Enter	rprise Sciences						
Name of Mandatory Prelim	inary Study		-									
Number of Lessons			•				Credits	Language of				
	Theoretical		Practice		Lab	Requirements	(ECTS)	Education				
Full-time 150/39		1		2	0	M (Midterm	-	F 1' 1				
Correspondence 150/15		5		10	0	mark)	5	English				
Teacher responsible for the	course		Name		Dr. Andrea Szeremlei	Keszi-	Position	College Teacher				
Educational goals			The learning material establishing, operating financial issues. By th managerial, entreprene	giv g an e er euri	es board kno d transformi nd of the cou al and busin	wledge in entre ng firms, handl rse the students ess legal knowl	preneurial s ing their ass will be able edge in prac	kills such as sets and e to use their etice.				
			Theoretical	In a	a classroom ch lecture.	with the use of	projector or	computer in				
Typical delivery methods			Practice	Fli sm	pchart, black aller semina	board and other r rooms suitable	r multimedi e for group v	a equipment in work				
			Lab	-								
Requirements	Students will know the basic terms of understand the effect r know the legal backgr environments, know the economic sy Ability Students will be able to use terms of this fie to identify and determ to understand the step to understand and use Attitude They are open and will their opinion, but with circumstances of their	eld p eld p eld p ine s of the ulling	ntrepreneurs hanisms of o d of compar ms, aims and professionall the resource company ai relevant lite g to discuss a disclosing a n company.	hip, operating firms, ites, their intern I strategies of fi y, s of companies, ms and strategie rature. Ill points of the ny important in They have sens	al and exter rms. es, cases, as we formation a ibility to fir	nal ell as express bout the ad potentials						
Brief description of the sub	ject content		Autonomy and respon Students feel responsi cooperate with each or opportunities for prob The value chain and c technical and economi logistic buyer satisfact chain: system (networ Potential suppliers and supplier evaluation in importance of demand systems with buyer's o	bilit ther lem reat ic co tion k) c l the inte l an cooj	bility ty for both th . They have s. ion of doubl onnections o . The custon of business re e internet. Evernet. Strateg ticipation in peration. Ma	eir developmer sensibility to fu e value both for f value chain. T her value and th elationships. Th valuation of sup ic procurement production logi nagement of cu	nt and envir nd possible buyers and he custome e internet. T e role of sup pliers, the c . The metho stics. Resou stomer rela	onment. They resolving suppliers. The r value and The supply ppliers. riteria of ods and urce planning tionship				

	and its logistic problems. International transport. Competitiveness and supply
	chain management. Integration of supply chain. Measurement of supply chains.
	Tendencies in supply chain management.
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Essay
Activity forms of students	writing
	William D. Bygrave - Andrew Zacharakis (2014): Entrepreneurship, 3rd
Compulsory reading and its availability	Edition, John Wiley & Sons, DUE Library
	Materials on MOODLE
P ecommended reading and its availability	Jerome Katz, Richard Green (2014) Entrepreneurial Small Business. 4th ed.
Recommended reading and its availability	McGraw-Hill International Ed., ISBN: 978-0078029424, DUE Library
Hand-in Assignments/ measurement reports	Processing and analysis of 1 chosen case study (On week 8th)
Description of midterm tests	Midterm tests on weeks 7th and 12th. Supplementary test on week 13th.

2024

Mathematics 2.

Subject	In Hung	garian	Matematika 2.	Matematika 2. Level A										
name	In Engli	ish	Mathematics 2. Code DUEN-IMA-21											
Subject code	•					•	•							
Responsible	educatio	nal												
unit			Institute for In	format	icon Tech	nology								
Name of Mar	ndatory													
Preliminary S	Study		DUEN-IMA-1	51- Ma	thematics	1.								
Number of L	essons							Credits	Language of					
	Theoret	ical	Practice		Lab		Requirements	(ECTS)	Education					
Full-time	150/39	1		2		0		, ,						
Corresponde		-				-	M (Midterm mark)	5	English					
nce	150/15	5		10		0	()	-	8					
Teacher resp	onsible t	for							Associate					
the course	01101010		Name		Dr. Antal	Joós		Position	Professor					
			To be acquaint	ad with	the basic	knowlada	a referring to mathe	natics probabil	ity mathematical					
			statistics which		uired to t	he special	subjects as well as i	improvement of	fity, mathematical					
Educational g	goals		knowledge to s	tudy or	Juneu to t	literature	Subjects, as well as I	inderstands the	most remarkable					
			relations connections and set of ideas											
			relations, com	cettons	Introduc	in a notion	a and matheda in lag	ture hall using	blool the outdoud					
			Theoretical		nroioato	ing notion	s and methods in lec	aure nan using	Diackboard and					
Typical daliy		hada			Taashin	a in small	anouna coluina com	nutational and	anniad avanaisas					
i ypical deliv	ery met	noas	Practice		Leinan	Leaching in small groups, solving computational and applied exercises.								
			Lab		Using p	•								
			Lau Knowledge											
			Knowledge Student knows methods and procedures required for solving of methometical tasks from accomming											
			Student knows methods and procedures required for solving of mathematical tasks from economic											
			areas. Student has enough knowledge referring to mathematics, probability, and mathematical statistics which are required by his/her special field.											
			statistics which are required by his/her special field											
L .			Ability											
Requirement	s (expre	ssed	Student is able to apply the studied mathematical knowledge and activity. Student is able to apply											
in learning			the studied methods and procedures. Student is able to create an own solving-plan and argue.											
outcomes/co	mpetenc	ies to	Student is able to organize his/her own learning procedure as well as to find and use different											
be acquired)			learning sources.											
			Attitude											
			Student is willing getting acquainted with mathematical developments and innovations and their											
			acceptance. Student is interested in new methods and means referring to his/her specialization.											
			Autonomy and responsibility											
			Student takes responsibility for his/her own work and the works of fellows at school											
			Combinatorial analysis. Experiment, sample space and events, basic event-operations. The											
			probability of an event. Axioms of probability. Conditional probability. Independent events.											
			Theorem of Total Probability. Bayes' Theorem. Random variables and their characteristics.											
			Notable probability distributions. The Week Law of Large Numbers. The Central Limit Theorem.											
Brief descrip	tion of t	he	Basic notions in statistics. Samples. Descriptive statistics. Numerical and graphic characterization											
subject conte	ent		of data sets. Int	ference	s about a	population	. Theory of estimation	on. Point estima	tion and estimation					
			by confidence	interva	l for the p	opulation 1	nean, for standard de	eviation and for	a proportion.					
			Statistical hypotheses, basic concepts. Parametric tests for the mean and for the standard											
			deviation.											
			Nonparametric tests. The bases of correlation and regression analysis											
			Learning of the	e theory	with dire	ection and	without direction. So	olving mathema	tical exercises with					
A otivity form	of of st-	dante	direction and w	vithout	direction	using patte	rn and examples. Di	rected learning	of theoretical					
Activity form	iis or stu	uents	material 10 %	Indepe	ndent lear	ning of the	oretical material 30	% Directed exe	rcise solving 30 %					
			Independent ex	ercise	solving 30) %			-					
Compulsory	reading	and	[1] R.E. Walpo	le, R.H	I. Myers,	S.L.Myers.	K.Ye: Probability a	nd Statistics for	Engineers and					
its availability Scientists, 9th Edition, ISBN 978-0-321-62911-1							-							

	[2] Ross, Sheldon: A First Course in Probability, Pearson Education Inc., ISBN 0-13-201817-9
	http://zalsiary.kau.edu.sa/Files/0009120/Files/119387_A_First_Course_in_Probability_8th_Editio
Recommended reading	n.
and its availability	pdf
and its availability	
	[3] Hoel, Paul G.: Introduction to Mathematical Statistics (A Wiley Publication in Mathematical Statistics) Third Edition, John Wiley & Sons, Inc. New York-London-Sydney
Hand-in Assignments/	
measurement reports	
	Test 1. Probability 1.
	Content of the lectures and seminars. Combinatorial analysis. Operation with events. Applications
	of the theorems of probability. Dependency and independency of events. Theorem of Total
	Probability and Bayes' Theorem.
	(20 scores, 20 minutes, according to the course program)
	Test 2. Probability 2.
	Content of the lectures and seminars. Random variables. Cumulative distribution function and density function and their properties and applications. Calculation notable numerical
	characteristics.
	Notable discrete and continuous probability distributions. Law of Large Numbers.
Description of midterm	(30 scores, 25 minutes, according to the course program)
tests	
	Test 3. Mathematical statistics 1.
	Content of the lectures and seminars. Basic terms and definitions. Graphical and numerical
	characterization of data sets. Point estimation and estimation by confidence intervals.
	(20 scores, 20 minutes, according to the course program)
	Test 4. Mathematical statistics 2.
	Content of the lectures and seminars labors. Testing hypotheses. Basis of correlation and
	regression
	analysis.
	(30 scores, 25 minutes, according to the course program)
	Usage of cellular phone is prohibited.

2024

Industrial materials

		in Hungar	rian	Műszaki an	yagismer	Level	MA						
Name of th	ne subject	in English	I	Industrial m	aterials				Code	DUEN-MST-210 DUEL-MST-210			
Responsibl	le educatio	nal unit		Technical Institute, Structural Integrity Department									
Name of co	ompulsory	prior learn	ning										
Туре		Theoretic	al	Practice	Practice Lab			Requirement	Credit	Language of education			
Full time	150/39	per week per term	1	per week per term	0	per week	2	F	5	english			
Teacher re	sponsible t	for the subi	iect	Name	0	Dr Imre Ko	vács		schedule	associate professor			
	sponsible	tor the sub	jeet	Goals deve	lonment	objectives	vaes		senedule	associate professor			
Training objective and justification of the course (content, output, location in the curriculum)			tion of ation in	The aim of through wh shell structu determine f analysis of c about the re to select the	The aim of the course is to provide students with a basic knowledge of chemistry, hrough which they will become familiar with the structure of materials, the electron shell structure that determines material properties, the types of chemical bonds that determine macroscopic properties, and the microscopic structure and methods of analysis of different types of materials (metals, ceramics, polymers). Students will learn about the relationships between the structure and properties of materials, enabling them to select the most suitable materials for a given application in simple cases.								
				Theoretical	Project	or, ppt lectu	res, lear	ming materials a	vailable in	n moodle.			
Typical de	liverv met	hods		Practice									
r y prour de	nivery mee	lious		Lab	Labora	tory measur	ements	and calculations	in groups	of up to 20 people.			
				Other									
Requirements (expressed in terms of learning outcomes)			ns of	area of engineering. Knowledge of the general and specific mathematical, scientific and social principles, rules, contexts and procedures necessary for the operation of the field of engineering. Thorough knowledge of the materials used in the field of engineering, the methods of their manufacture and the conditions of their use. Ability Ability to plan, organise and carry out independent learning. Attitude Open to learning and absorbing knowledge related to chemistry and materials related to their qualifications and areas of expertise. Interested in new methods and tools related to the field. Autonomy and responsibility It takes its decisions independently, in consultation with other disciplines, and takes									
Short description of the subject content Types of student activities				characteristics of chemical bonding. Electron affinity, electronegativity, oxidation number. Strong bonds. Weak bonds. General characterisation of metals, reactivity. Basic knowledge of organic chemistry. Grouping of carbon compounds, nomenclature. Isomerism. Main reactions of organic substances. Interconnection of macromolecules as a basis for polymer production. Basic knowledge of silicate chemistry. Basic knowledge of colloid chemistry. State change in solid phase processes. Polymorphic transformation. Types of engineering materials. Structure - processing - properties interaction. Crystal structure, crystal systems. Crystal, crystallite. Crystal lattice defects. Movement of atoms in matter, diffusion. Phases and constituents of metallic materials. Significance, definition of equilibrium phase diagrams. Processing of heard text with annotation 50%. Conducting material tests 30%									
Required li	iterature a	nd contact	details	 Balázs Verő, Éva Dénes, Zsolt Csepeli:Introduction to the Engineering Materials Science, Főiskolai Kiadó, Dunaújváros 									
Recommer	nded literat	ture and co	ntact		r Tamás	Tóth Mech	anical n	monerties of mot	erials and	methods of their			
details			mact	in	vestigatio	n. <u>Főisk</u> ola	<u>i Kiad</u> ó,	, Dunaújváros, F	Lungary				

Description of tasks to be submitted/measurement reports	The student shall draw up a measurement report on the measurements carried out.
Description and timetable of the workshops	A final paper in weeks 6 and 12 from the lectures and laboratory classes.

Heat and Fluid Dynamics

		in Hungaı	ian	Hő és áramlástan							А		
Name of the subje	ect	in English	1	Heat and Fl	uid Dy	nar	Code	DUEN-MUT-250 DUEL-MUT-250					
Responsible educational unit				Technical Institute, Department of Energy and Mechanical Engineering									
Name of compuls	ory	prior learr	ning	DUEN-MG	DUEN-MGT-151								
Туре	,	Theoretic	al	Practice			Lab		Requirement	Credit	Language of education		
Full time 150/3 Part time 150/1	9	per week per term	1	per week	1		per week per term	1	Е	5	english		
Teacher responsil) le fo	or the sub	iect	Name	5		Fndre Kiss	PhD		schedule	college professor		
Training objective	e and	1 justificat	tion of	Goals, deve	lonme	nt	objectives	, 1 11D		senedule	conege professor		
the course (content, output, location in the curriculum)			The study o	f the pr	ract	tical problem	ns solu	tions in heat and	d fluid dyn	amics.			
,			Theoretical	For a or an	all s 1 ov	students, us verhead proj	ing a lai ector	rge speaker, a b	oard prese	ntation, a projector			
Typical delivery	neth	ods		Practice	For e	eve	ry students,	probler	n solving in sm	all groups			
				Lab	Meas	sure	ements in p	airs					
				Other									
				Knowledge									
				You are full	y awar	e of	f the basic f	acts, dir	ections and bou	ndaries of	the field of technical		
				expertise. Y	ou are	fan	niliar with t	he gene	ral and specific	rules, con	texts and procedures		
				the most im	or the c		ivation of t	he techi	Ho is fully for	nows the	the main theories of		
				his field of	knowle	edo	pe and proh	lem sol	ving Methods	At the em	nloving level he is		
				familiar wit	h the m	nea	surement pr	ocedure	es used in mech	anical eng	ineering, their tools.		
				instruments	and m	nea	suring equi	pment.	It can interpre	t, characte	rize and model the		
				structure, operation, design and relationship of the structural units and components of									
				mechanical systems.									
				Ability									
				It is capable of basic analysis of the disciplines that make up the technical field of									
				knowledge, the synthetic formulation of correlations and the activity of evaluating the quality.									
				It is able to apply the most important terminology, theories and procedures of the									
				technical fie	eld in w	vhic	ch they are	perform	ied.				
				It is capable to	identify	nni v ro	ng, organis	ssional	problems to so	lve them i	n principle and		
				to explore.	ormula	y it ate	and provide	e practic	cal background	(standard o	operations		
Requirements (ex	pres	sed in teri	ns of	(e.g., the application of this problem).									
learning outcome	s)			It is able to understand and use the typical expertise, computer science and library									
				resources of its field. The knowledge acquired is capable of carrying out tasks in its									
				field									
				solution of the application.									
				It is capable of creating basic models of technical systems and processes.									
				it is able to communicate in your momer tongue in a professional, professional lyande									
				Attitude									
				He accepts and authentically represents the social role of his profession his									
				fundamenta	l relatio	ons	hip with the	e world.			-		
			It is open to the knowledge and acceptance and authentic transmission of professional,										
		technological development and innovation in the field of technology.											
				It strives to	resolve	e pr	oblems as i	nuch as	possible in coo	operation w	/itn others.		
				With sufficient endurance and monotony tolerance to carry out practical activities									
				Using his a	cauirea	d te	echnical kn	owledge	e, he strives to	learn mo	re about observable		
				phenomena	to des	cril	be and expl	ain his l	legalities.				
				In the cours	se of it	ts v	vork, it cor	nplies v	with and enforc	es the rele	evant safety, health,		
				environmental and quality assurance and control requirements.									

	Autonomy and responsibility						
	Even in unexpected decision-making situations, it independently takes a look at the						
	broad, underlying professional issues and developthem on the basis of specific sources.						
	In carrying out his professional duties, he also cooperates with qualified professionals						
	in other fields (primarily technical, economic and legal).						
	Share your experiences with colleagues to help them grow.						
	It takes responsibility for the consequences of its technical analyses, its proposals and						
	the decisions that are taken. With sufficient endurance and monotony tolerance to carry						
	out practical activities						
	Have.						
	Using his acquired technical knowledge, he strives to learn more about observable						
	phenomena, to describe and explain his legalities.						
	In the course of its work, it complies with and enforces the relevant safety, health,						
	environmental and quality assurance and control requirements.						
	The basics of fluid dynamics and thermodynamics. Euler and Bernoully equations, Haagen-Poiseuille equations, viscosity, laminar and turbulent flow, pressure drag in turbulent flow. Pressure drop in fittings. Impulse theorem. Similarity. Solid body in						
Short description of the subject	viscous substance. Intensive and extensive quantities. Uneversal and unified gas law.						
sontent	The mechanical work and the heat, and the firstlaw of thermodynamics. Isochoric,						
content	isobaric, isotherm and adiabatic processes. The politropic process. Cycles. Otto and						
	Diesel cycles. Enthalpy, entropy, the second law of thermodynamics. Real gases.						
	Thermal energy transport, conductance. convection and radiation. Heat pump and						
	refrigerator.						
	Lecture: Written text processing with note-taking 40%, theoretical material self-						
Types of student activities	processing 20%, task solution 40%.						
51	Labor: Heard text processing with note-taking 10%, home preparation for						
	measurement 20%, measurement 40%, minutes preparation 30%.						
	Kiss E. Heat and Fluid Dynamics Electronic notes (Moodle)						
Required literature and contact details	Kiss E. Heat and Fluid Dynamics Problem solving Electronic notes (Moodle)						
	Kiss E. Laboratory syllabuses Electronic notes (Moodle)						
Recommended literature and contact details	•						
Description of tasks to be	Full time: 5 measurement reports						
submitted/measurement reports	Part time: 3 measurement reports						
	There are two tests during the semester. the first is in the 6th, and the second in the						
Description and timetable of the	13th week. The test is consisting of 10 freechoise questions (max. 30 points), two						
workshops	assay questions (max 20 points), and two problems tos olve for 50 points. If the						
workshops	results of the two test is as an average lower than 51 points, the semester is not						
	successful. There are chances to repeat the tests.						

General and Business Statistics

		In Hungarian		Általános és gazdasági	Level	А						
Subject name In English			General and business s	Code	DUEN-TKT- 211							
Subject code												
Responsible educational unit				Institute for Social Sc Department of Econor	ien nic:	ces s						
Name of Mandatory	Prelim	inary Study										
Number of Lessons								D	Credits	Language of		
		Theoretical		Practice		Lab		Requirements	(ECTS)	Education		
Full-time 1	50/39		1		0	2	M (Midterm	e.	F 1' 1			
Correspondence 1	50/15		5		0	10)	mark)	2	English		
Teacher responsible f	for the	course		Name		Dr. Antal	Jo	ós	Position	Associate Professor		
Educational goals				Students will be aware of and able to use the electronic databases. They know and are able to use high-level statistical methods to analyse economic and social phenomena. They acquire high-level statistical tools necessary for carrying out analyses. After the course students can apply the basic statistics methods. They can prepare statistic reports necessary to understand business processes. They can make simple statistic analyses from the data available. They can apply mean, dispersion and distribution methods used for analysing quantitative data. They are capable of making and analysing PIVOT tables. They can quantify factors affecting complex economic processes by standardisation. They can apply the method of correlation calculation and variance analysis to explore relations as well as association indices. Having completed the course the students are able to use statistic databases online. They can collect, systematise, process and								
Typical delivery met	hods			TheoreticalIn a classroom with the use of projector or computer in each lecture.PracticeIn a classroom with the use of projector or computer in each seminar.								
				Lab								
Requirements (expressed in learning outcomes/competencies to be acquired)				Knowledge Students will be able to use the electronic data know and use statistic know statistic methods Ability Students will be able to use simple statistic me make simple statistical .use mean, scatter and create and analyze Piv use statistical database collect, organize, procu use a statistical softwa Attitude They are open to the a way of thinking and fu They are curious abou situation. Ready to share the cor	o: bas me s to o: etho l an dis ot c s o esss re i uth inda t ar	es thods for t solve anal ds alysis persion for thart n the intern and analyz ndividuall entic trans amental ch ad interester	he ys a net ze y ar	purpose of eco is tasks nalyzing quanti t data, ssion and deliv acteristics of th in learning, and knowledge wit	ery of the c eir professi l elementar h others.	social analysis comprehensive on. y work		

	Autonomy and responsibility
	They work independently, under constant control.
	Make decisions in legal and ethical rules of the field.
	Feel responsibility about own or group led work, about the achievements and
	failures
	Basic definitions of statistics. Methods of purchasing and using data. Basic
	statistical operations. Simple analysis, ratios, graphical representations.
	Definition of multitude according to a criterion. Arrangement and classification
	according to quantitative criteria. Types of quantitative series. Quantitative
	values. Graphical representations and attributes of frequency distributions.
	Position indexes. Types of means. Diffusion indexes. The analysis of
	concentration. Shape indexes. Description of multitude according to several
Brief description of the subject content	criteria. Description of heterogenic multitude. Part and complex ratio. Part and
Bilei description of the subject content	main means. Dispersion and variance of part and main multitude. Description of
	the relation between criteria. Types of relations between criteria. Association,
	mixed relation, correlation, rank correlation. Comparison with standardization
	and index calculation. Resolution of differences, resolution of quotient.
	Comparison of aggregates with index calculation. Aggregated types of indexes.
	Mean types of indexes. Laspeyres- and Paasche indexes. Price – scissors.
	Analysis of timelines. Decomposition timeline models. Smoothing, clearing,
	prognosis, cyclicality, seasonality
	Weekly online tests: 20%
Activity forms of students	Frontal work: 40 %
Activity forms of students	Individual or group work: 20%
	Test: 20%
	BLACK Ken: Business Statistics for contemporary decision making, Sixth
Compulsory reading and its availability	edition, Letöltés: http://fac.ksu.edu.sa/sites/default/files/business-statistics-for-
	contemporary-decision-making-by-ken-black_1.pdf
	HANKE, John E. – REITSCH, Arthur G. (1991): Understanding business
	Statistics. Boston: Richard Irwin Inc. 878 p. ISBN 0-256-06627-2
	TRIOLA, Mario F. (2012): Elementary Statistics Plus. 12th ed. Upper Saddle
Recommended reading and its availability	River: Pearson Education 864 p. ISBN 978-0-321-8369-60
Recommended reading and its availability	FREEDMAN, David – PISANI, Robert – PURVES, Roger (2007): Statistics.
	720 p. ISBN 978-0-393-92972-0 (Teljes szöveggel: <u>http://www.e-</u>
	bookspdf.org/download/statistics-4th-edition-david-freedman.html) (Letöltve:
	2014. május 28.)
Hand-in Assignments/ measurement reports	Written mid-term tests (2)
Description of midterm tests	Questions concerning the basic concepts of statistics. Numerical exercises.

2024

Principles of Accounting

	In Hungarian	Számvitel alapjai	Level	А							
Subject name	In English	Principles of Accounting DUEN- 217									
Subject code											
Responsible educational un	it	Institute for Social Department of Econ	Institute for Social Sciences Department of Economics								
Name of Mandatory Prelim	inary Study										
Number of Lessons		•				D	Credits	Language of			
	Theoretical	Practice		Lab		Requirements	(ECTS)	Education			
Full-time 150/39	1		2		0	M (Midterm	F	En alliala			
Correspondence 150/15	2		10		0	mark)	Э	English			
Teacher responsible for the	course	Name		Dr.Erzsé	bet S	Szász	Position	Associate Professor			
Educational goals	By the end of the co philosophy, structur Accounting. They w and accounting in ea and tools necessary will be able to under professional guidance	By the end of the course, students will get acquainted with the purpose, philosophy, structure, requirements and principles of the (Hungarian) Law of Accounting. They will have an overall view of the interrelations of tax systems and accounting in economic practice. They will be familiar with the materials and tools necessary for the application of accounting software programs. They will be able to understand business processes and analyze them under professional avidence.									
		Theoretical	In a	a classroc h lecture	om v	with the use of a p	rojector or	a computer in			
Typical delivery methods	Practice In a classroom with the use of a projector or a computer each seminar.										
		Lab									
Requirements (expressed ir outcomes/competencies to	 Students know the most important context and theories of accounting and they make up the terminology. the basic knowledge acquisition and problem-solving methods of accounting Ability Students will get acquainted with the purpose, philosophy, structure, requirements and principles of the (Hungarian) Law of Accounting; and they will have an overall view of the interrelations of tax systems and accounting in economic practice. They will be able to: apply accounting software programs. understand business processes analyze them under professional guidance understand economic phenomena analyze their effects on the balance and results of a business Attitude Good accountants are patient, well-educated and have empathy, i.e. they can identify with the representatives of the other side and accept their opinion. 										
	 Good, ruture-oriented bargainers respect their counterpart, are trustworthy and not aggressive. They are open and willing to cooperate discussing all points of the negotiation process, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They take responsibility for their work. Autonomy and responsibility Students are expected to consider comprehensive, fundamental professional problems independently based on the literature and other recommended sources for the course. Students are open to cooperate with other professionals of the field and take 										

	responsibility for their professional stand.
Brief description of the subject content	
	Weekly tests: 20%
Activity forms of students	Frontal work: 30 %
Activity forms of students	Individual or group work: 35%
	Test: 15%
	Materials on MOODLE from accountingcoach.com
Compulsory reading and its availability	http://www.accountingcoach.com/
	Accounting Principles: Finance Skills [free-management-ebook].
	Full text at http://www.free-management-ebooks.com/dldebk/dlfi-principles.htm
	AGTARAP-SAN JUAN, Donatila (2007): Fundamentals of Accounting: Basic
	Accounting Principles Simplified for Accounting Students. Bloomington:
Recommended reading and its availability	Author House, 408 p.
	ISBN 978 1 434 32299 9
	CELENDER, Michael A. (2013): Accounting Basics: Complete Guide. Create
	Space Independent Publishing Platform, 378 p.
	ISBN 978 1 482 32481 5
Hand-in Assignments/measurement reports	
Description of midterm tests	General principles, case study

2024

Business Economics

In Hungarian				Vállalatgazdaságtan	Szintje	А						
Subject name		In English	h Business economics						А			
Subject code			DUEN-TVV-220									
Responsible educati	onal ur	nit				Institute for	Social Science	S				
				Departm	ent	of Managen	nent and Enterp	rise Scienc	es			
Name of Mandatory	Prelin	nnary Study	- 6 1	-			1	G 1'	T			
		Theoretics		Lessons Practice		Lab	Requirements	(FCTS)	Language of			
Full-time	150/39	Theoretica	1	Tactice	2			(LC15)	Education			
Correspondence	150/15		5		M (Midterm mark)	5	English					
Teacher responsible	for the	course		Name		Dr. Andrea I Szeremlei	Keszi-	Position	College Teahcer			
Educational goals				types of new companie the role of business, ac services. It also focuse course the students wil firms, how to handle cl enterprises.	es, t tivi s oi l be han	asks during ity systems o n capital and e able to und ges and crisi	their establishin f operating firm planning of con erstand econom s in firms' life, with the use of a	g. The cours as like prod mpanies. By ic and finat transition a	rse deals with uction and y the end of the ncial results of and finishing of			
Tynical delivery m	ethods			Theoretical	each lecture.							
i ypical denvery m	cinous			Practice	smaller seminar rooms suitable for group work							
				Lab -								
Requirements			Students will know the bas know the cap planning in c know the dif know the dif know the tas Ability Students will to use terms to evaluate th to understand to handle cha Attitude They are open and will their opinion, but with circumstances of their development.	Students will • know the basic terms of business economics, • know the capital structure of companies, and the role and functions of planning in companies, • know the different types of changes and crisis of firms, • know the tasks of transition and finishing of firms. Ability Students will be able • to use terms of this field professionally, • to evaluate the capital structure of companies, • to understand the steps of company aims and strategies, • to handle changes and crisis of firms. Attitude They are open and willing to discuss all points of the cases, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They have sensibility to find potentials for								
				Autonomy and responsib Students feel responsib cooperate with each ot opportunities for proble	nsil oilit her em	bility ty for both th . They have : s.	eir developmen sensibility to fir	t and envir id possible	onment. They resolving			

Brief description of the subject content	Becoming an entrepreneur. Success fails and experiences in enterprises. The essence, term, necessity, fulfilment and stakeholders of business. The role, types, operation, life stages of enterprises. The business plan. Recession, transition and termination of firms. Success, as motivating factor.
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Essay writing
Compulsory reading and its availability	 Sloman, John - Kevin Hinde - Dean Garratt (2013) Economics for business. Pearson, DUE Library Materials on MOODLE
Recommended reading and its availability	 Paul Keat; Philip K Young; Steve Erfle (2013): Managerial Economics (7th Edition), Prentice Hall, ISBN : 0133020266, DUE Library

2024

Mathematics 3.

Subject	In Hung	arian	Aatematika 3. Level A										
name	In Engli	sh	Mathematics 3. DUEN-IMA-11										
Subject code													
Responsible	educatio	nal											
unit			Institute for In	format	ion Techr	ology							
Name of Mar	ndatory												
Preliminary S	Study		DUEN-IMA-1	51 Mat	hematics	1.							
Number of L	essons							Credits	Language of				
	Theoreti	ical	Practice		Lab		Requirements	(ECTS)	Education				
Full-time	150/39	0		3		0							
Corresponde	150/15	0		15		0	М	5	English				
Teacher resp the course	onsible f	òr	Name	I	Dr. Bálin	t Nagy		Position	College Professor				
Educational g	goals		A mathematica Methods of pro these methods	il theory oblem s are dev	y is introc olving in reloped	luced to solve q the course topic	uantitative proble are introduced a	ms in technical and abilities for	and other fields. students to use				
			Theoretical		re hall using bla	ackboard and							
Typical deliv	ery meth	nods	Practice										
			Lab		itational and ap	plied exercises.							
			Knowledge										
Requirements (expressed in learning outcomes/competencies to		ssed ies to	Student knows methods and procedures required for solving of mathematical tasks from economic areas. Student has enough knowledge referring to mathematics, probability, and mathematical statistics which are required by his/her special field Ability Student is able to apply the studied mathematical knowledge and activity. Student is able to apply the studied methods and procedures. Student is able to create an own solving-plan and argue. Student is able to organize his/her own learning procedure as well as to find and use different learning courses.										
oe acquirea)			Attitude										
			Student is willing getting acquainted with mathematical developments and innovations and their										
			acceptance. Student is interested in new methods and means referring to his/her specialization.										
			Autonomy and responsibility										
			Student takes responsibility for his/her own work and the works of fellows at school										
Brief description of the subject content Solving nonlinear equations. Separable differential equations. Variable transformation: y/x. First order linear differential equations. Second order line differential equations. Second order line differential equations.							es and surfaces of l integration. mation: ax+by+c. der linear						
Activity forms of students Learning of the theory with direction and without direction. Solving mathematical exercise direction and without direction using pattern and examples. Directed learning of theoretic material 10 % Independent learning of theoretical material 30 % Directed exercise solving Independent exercise solving 30 %							cal exercises with f theoretical ise solving 30 %						
Compulsory its availabilit	reading a y	and	Talata, I.: A Gu	iide to I	Mathemat	ical Analysis, D	unaújváros, 2007	, pp. 1-79. Elect	ronic Study Guide.				
Recommende and its availa	ed readin bility	ıg	Finney, R. L. ;	Thoma	as, G. B.:	Calculus, Addis	on-Wesley, New	York, 1990.					
Hand-in Assi	ignments	s/											
measurement	t reports												
Engineering construction

		in Hungar	ian	Gépszerkes	ztés	Level	А								
Name of th	e subject	in English	L	Engineering	g construc	tion			Code	DUEN-MGT-112 DUEL-MGT-112					
Responsibl	e educatio	nal unit		Technical I	nstitute, D	epartment o	of Energ	gy and Mechanio	cal Engine	ering					
Name of co	ompulsory	prior learn	iing			1		1	1	1					
Туре		Theoretica	al	Practice		Lab		Requirement	Credit	Language of education					
Full time Part time	150/39 150/15	per week per term	1 5	per week per term	2 10	per week per term	0	- F	5	english					
Teacher rea	sponsible	for the subj	ect	Name		Tamás Zah	ola		schedule						
Training ol	biective an	d justificat	ion of	Goals, development objectives											
the course	(content, c	output, loca	tion in	and their int	eractions.	In heating,	cooling	, ventilation and	l air condit	tioning, the systems,					
the curricu	lum)			system components, and											
				Theoretical	For all projecto	students, in or or on-line	a large using l	lecture, presenta MS Teams, usin	ation on a g a compu	whiteboard, iter network.					
Typical de	livery met	hods		Practice	Group	work presen	tations								
				Lab											
Other															
				Knowledge	:										
Requirements (expressed in terms of learning outcomes)			ns of	You know the Comprehension solving in the design print operational structural under the design print operational structural under the design print operational structural under the design print operation of the design of	he termin sive know he main in nciples a processe nits of th erstand, or and elemiship of the rinciples job accordian, organ dentify, for routine pr al applic necessary rning and ualification e field. and resp	ology, key of vledge of the theories of and method s. Comprehe e machiner characterise ments of m the system co- and method rding to you ise and carr ormulate and ofessional p ation of s y for their se absorbing ons and are	concept ne meth the field ls, mac lensive y and p and r echanic ompone s of me r qualif y out in d solve roblem tandard <u>olution</u> .	s and theories re- nods of knowled d. Has a thorou- chine technolog knowledge of ower tools, me- nodel the stru- cal engineering nts used. Apply chanical produc- fications. Idependent learn (through the pra- s, and to identify operations) the dge related to m pertise. Interest	elated to ye lated to ye lage acquis gh unders gy, contro the opera chanical e cture and systems, the related t. ing. actical app y, formulat ne theore echanical ed in new	bur field. sition and problem- tanding of machine ol procedures and ting principles and quipment and tools l operation of the and the design and d computational and plication of standard e and solve (through tical and practical engineering related methods and tools					
Short descr content	ription of t	he subject		Taking responsibility for your own work and the work of others. Typical surfaces and bodies of engineering practice. Plane intersection of plane bodi Plane section of curved bodies. Passing through flat bodies. Passing of curved bodi The ISO tolerance system. Tolerances for length dimensions. Fits. Surface qual metrics and how they are specified. Typical design of cast, welded and machined par Reconstruction of machine parts (reverse engineering). Processing theoretical material with guidance 20 % Independent processing of											
rypes of st		vittes	1	processing	of tasks 4	0 % Labora	tory me	asurements with	guidance	- -					
Required li	iterature ai	nd contact of	Jetails	• Moodle											
Recommer details	nded literat	ture and co	ntact	R Pr st	obert L. N rentice Ha ructure,IS	orton: Mac all Upper Sa SBN 10: 008	hne De ddle Ri 013405	sıgn - An Integr ver NJ Franz SX	ated Appr Koenigsbe	oach, 2006, Pearson erger, Machine tool					
Description submitted/	n of tasks t measurem	to be ent reports													

2024

Description and timetable of the workshops

Hungarian Szerkezeti anyagok technológiája Level A Subject name English Technology of Structural Materials Code DUEN(L)-MUA-116 Responsible educational unit Institute of Engineering DUEN-MUA-216 Name of prerequisite subject Class hours / week Language of **RequirementsECTS** Type Theoretical Practice Lab instruction Full time course 150/39 2 Long distance Μ 5 English per per 150/15 per Semester 10 course Semester Semester Dr. Zsolt Csepeli Position College Teacher Teacher responsible for subject Name The aim is that the students be able to select the materials and production technologies that are the most suitable for a given objective. The students learn the manufacturing, properties, application and property modification technologies Educational goal (competencies to be (alloying, melting, plastic deformation, heat treatment, surface treatment), melting acquired) and forming technologies of the most important metallic and non-metallic structural materials. The students learn most important welding technologies and their application. In a classroom with the use of projector or computer in each Theoretical lecture. Typical transfer ways Practice In a classroom with the use of projector or computer in each Lab seminar. Knowledge Students will know the basic terms of matherial structures know the Phase diagrams and transformations know the steel production methods know the steel applications Requirements (expressed in educational Ability results) They are able to use the obtained skills even few years later, in real situations Attitude Open-minded for the mechanical innovation on their field. Autonomy and Responsibility Responsible for their results. Phase diagrams. The Fe-Fe3C equilibrium phase diagram. Phase transformations. Steel production. Basic oxygen steelmaking. Electric arc furnace. Continuous casting. Steel processing. Hot rolling. Cold rolling. Forging. Casting. Heat treatment Brief description of the subject content of steels. Mechanical properties. Strengthening mechanisms. Steel applications Sustainability (steel and the environment, principles of life cycle thinking). Aluminum production and processing. Properties of aluminum. Heat treatment of aluminum. Case studies for the industrial application of aluminum. Understanding and assimilation of the topics of presentations 50% Testing of Forms of student activity materials 30% Laboratory excercises 20% 1. William D. Callister: Materials Science and Engineering, An Introduction, 2007, Wiley Compulsory reading and its availability 2. www.steeluniversity.com 3. www.alumatter.info 4. ASM Metals Handbook Desk Edition 2001 Recommended reading and its 5. ASM Metals Handbook Volume 14 - Forming And Forging availability 6. core.materials.ac.uk

Technology of Structural Materials

2024

Mechanics I.

Subject name Hungarian			Mechanika 1.				Level	А					
Subject name		English		Mechanics 1.			Code	DUEN-MUG-152					
Responsible educati	onal un	it		Institute of Eng	gin	eering				·			
Name of prerequisit	e subje	ct											
Tuna		Class hours /	w	eek				Doquiromonto	ECTS	Language of instruction			
туре		Theoretical		Practice		Lab		Requirements	ECIS	Language of instruction			
Full time course	150/39		1		2		0						
Long distance	150/15	per	5	ner Semester	10	per	0	E (Exam)	5	English			
course	150/15	Semester	5	per bemester	10	Semester	0						
Teacher responsible	for sub	oject		Name		Dr. András	sΖ	achár	Position	College Professor			
Educational goal (co	ompeter	ncies to be		Getting acquainted with the bases of statics and the strength of materials, forming									
acquired)				the application	sk	ill.							
				Theoretical	Int	roducing n	oti	ons and metho	ds in lectur	e hall, using blackboard.			
Typical transfer way	ys			Practice	Te ex	aching in s ercises.	ma	all groups, solv	ring comput	ational and applied			
				Lab									
		Other											
				Knowledge									
				Students will									
				know the basic terms of mechanics,									
				understand the effect mechanisms of mechanics,									
				know the the e	len	nents of loa	d-ł	bearing structu	res,				
Requirements (expr	essed in	educational		know the basics of design.									
results)				Ability									
				They are able to use the obtained skills even few years later, in real situations									
				Attitude									
				Open-minded	for	the mechai	nica	al innovation of	on their field	1.			
				Autonomy and Responsibility									
				Responsible fo	or th	eir results.							
				Concept of force, system of forces, equilibrium. Resultant of system of forces (using a calculation or a construction). Elements of load-bearing structures. Restraints. Static and load models. Reaction forces, internal loading functions and									
Brief description of	the sub	ject content		moment of a c stresses. Tensi	s. C ros ile	s section.	Co Co m	ncept of defor and the main	mations, str	ains and the mechanical properties of mechanics.			
		Basics of design: stress analysis of pure and complex load cases (tensile/compression, shearing, bending, torsion and combinations). Stress state and general Hooke's law. Concept equivalent stress.											
Forms of student ac	tivity			Assimilation o solving with/w	f tł ith	ne theoretic	cal nce	matter with/w : 15/35 %	ithout assis	tance: 15/35 % Problem			
Compulsory reading and its availability				 F.P. Beer, E.R. Johnston, E.R. Eisenberg: Vector Mechanics for Engi-neers ? Statics, McGraw Hill, New York, USA, 2004 F.P. Beer, E.R. Johnston, J.T. DeWolf: Mechanics of Materials, McGraw Hill, New York, 									
				USA, 2004									

CAD

Such is at a sure Hungarian			CA	AD			Level	А							
Subject name		English	CA	AD					Code	DUEN(L)-MUG-212					
Responsible educati	onal un	it	Ins	stitute of Enginee	rin	g									
Name of prerequisit	e subje	ct													
		Class hours	s / v	veek				D	ECTS	Language of					
Type		Theoretical	Pra	actice		Lab		Requirements	ECIS	instruction					
Full time course	150/39		0		0		3	MACL							
Long distance	150/15	per	0	non Comoston	0	per	15	M (Midterm	5	English					
course	130/13	Semester	0	per Semester	U	Semester	13	mark)							
Teacher responsible	for sub	oject	Na	me		Tamás Zal	ıola	a	Position						
			To make the students familiar with the practice of computer aided geometrical												
Educational goal (co	ompeter	ncies to be	ma	modelling through the use of a modern, parametrical modelling system (SolidWorks).											
acquired)			Bu	Building parametrical models of machine parts. Making assemblies and generating											
_			documentation for manufacturing.												
			Th	eoretical											
			Pra	actice											
Typical transfer way	/S				In	a classrooi	n v	with the use of	projector or	computer in each					
			La	b	sei	ninar.			1 5	1					
			Ot	Semma.											
			Kı	nowledge											
			Sti	idents will											
			kn	ow the basic term	is c	of CAD									
			able to creat asemblies												
			ab	le to generate dra	wii	ngs from p	arts	S.							
Requirements (expr	essed in	1	ab	le to create views	, se	ections deta	ail '	views							
educational results)			Ał	oility											
,			They are able to use the obtained skills even few years later, in real situations												
			Attitude												
			Open-minded for the mechanical innovation on their field.												
			Autonomy and Responsibility												
			Responsible for their results.												
			Fe	atures of parame	etri	c modelli	ng	systems. Bas	ic concepts	. Parametric geometric					
			ma	dels, associativit	y,	features as	s b	uilding blocks	, sketches,	geometric relations etc.					
			Pre	erequisites of rur	ni	ng the pro	gra	am, initial step	ps, screen a	reas. Contracting basic					
			fea	tures. Adding an	d r	emoving n	ate	erial.		-					
			Fe	atures demanding	g a	sketch. Fea	atur	res not demand	ling a sketcl	n. Creating protrusion,					
Brief description of	the sub	ject content	cu	t, chamfer, fillet a	ind	shell. Cre	atir	ng a revolution	solid. Swee	ep and loft. Geometrical					
-			rel	ations in sketches	s. T	The applica	tio	n of equations	to fulfil the	designer's intentions.					
			Liı	nking dimensions	. C	reating con	nfig	gurations and p	oart families	. Creating assemblies.					
			Th	e Top-Down tech	nnie	que. Gener	atiı	ng drawings fr	om parts. Ci	reating views, sections,					
			de	tail views. Genera	atir	ng drawing	s fr	om assemblie	s. Creating b	oills of material					
			au	tomatically.					-						
			- t	o understand and	lea	arn the sub	ject	ts of the preser	ntation maki	ng notes and using the					
			ele	ctronic course bo	ok	40%				0 0					
Forms of student activity			- e	executing the labo	orat	ory practic	es	20%							
		- p	oroblem solving s	ess	ion 20%										
			- s	olving tests 20%	}										
Compulsory reading availability	g and its	\$	So	lidWorks Online	He	elp									
Recommended read	ing and	its	- Descriptions and documentations related to SolidWorks												
availability - Descriptions and documentations related to Solid works															

2024

Management

	In Hungarian	Menedzsment	Level	А								
Subject name	In English	Management						DUEN-TVV- 114				
Subject code							•	•				
	•,	Institute for Social	Scie	nces								
Responsible educational un	1t	Department of Management and Enterprise Sciences										
Name of Mandatory Prelim	inary Study											
Number of Lessons		1				D	Credits	Language of				
	Theoretical	Practice Lab				Requirements	(ECTS)	Education				
Full-time 150/39	1		2		0		_					
Correspondence 150/15	5		10		0	М	5	English				
Teacher responsible for the	course	Name		Dr. habi Molnár	l Mó	nika Rajcsányi-	Position	College Teacher				
Educational goals	The module provide and in practice. The course is design information for the 1 the "special" manage	The module provides a comprehensive understanding of management in theory and in practice. The course is designed to familiarize students with the most important information for the management of labor organizations, to provide insight into										
	Theoretical	In a	a classroo h lecture	om w	with the use of pro	jector or co	omputer in					
Typical delivery methods	Practice	Practice In a classroom with the use of projector each seminar.										
		Lab										
Requirements	Students as potential Familiar with the fur important concepts, It learns supply man of the exercise of the Familiar with the pla procedures and meth Familiar with the lea leadership behavior. Ability Students will be able analyse and develop organizations effectively organize identify and solve pr integrate knowledge recognize and evalu handle operative pla work in groups accept divergent vie manage time select and focus on videntify, understand understand and man Attitude Open to accommoda	I ma ndar requ age fundanni nods ader the indi roble ate a nnir ws vario age and age the nods the indi roble ate a and age ader the indi roble ate a and ader the the ader the ader the the ader the the ader the ader the	nager: nental as irements nent tash netions. ng, organ ship style manager vidual ar ems dternativ g tasks ous tasks apply di organiza ew innov	spects s, relaces, the mization ment and teaces ess	s of science organ ationships and pre eoretical and met ion and managem dels and understa and decision mak am work nt leadership styl- <u>d processes</u> e approaches.	es	most I foundations tly used e in effective					
		Not think schemas. Susceptible develop	men	t opporti	unitie	es for exploitation	l .					

	Good, future-oriented bargainers respect their counterpart, are trustworthy and
	not aggressive.
	They are open and willing to discuss all points of the negotiation process, as
	well as express their opinion, but without disclosing any important information
	about the circumstances of their own company.
	Autonomy and responsibility
	In professional questions negotiators can play the role of a decision-maker and
	are able to solve problems alone. They can tackle problems as responsible
	persons, i.e. can decide if it is a need in a certain negotiation phase or situation
	to cooperate with others.
	Interpretation and origin of management. The role and importance of
	management in the governance of companies.
	Historical overview of management studies: concepts, schools, trends;
	similarities and differences.
	Practicing management functions:
	- Planning: vision of the future, goal hierarchy, short term and operative
	planning, planning methods.
	- Organizing: changing the structure, processes, defining organizations, division
	of labor, developing processes and organizational structures, structural
	differences of organizations, organization types and characteristics.
Brief description of the subject content	- Control: changing conditions, exercise authority, define norms, measurement,
	evaluation and adjusting, managing everyday problems.
	- Coordinating: harmonizing goals-processes-organization, coordination tools,
	operation control, task-authority-responsibility fit, control processes of
	organizations: rules of organization and operation, professional rules and
	regulations, job description.
	- Leadership: leadership effectiveness, leadership styles: characteristics, decision
	making theories, behavioral theories, contingency-approach.
	Organizational culture and strategy. Components and dimensions of culture.
	Understanding and analyzing cultural differences. Managing corporate culture.
	Frontal work: 30 %
Activity forms of students	Individual presentation 20%
Activity forms of students	Group work: 35%
	Test: 15%
	Williams-DuBrin-Sisk (1995):Management & Organization, South-Western
Compulsory reading and its availability	Publishing Co. Cincinnati, Ohio, USA
	Materials on Moodle
Performended reading and its availability	Chelsom-Payne-Reavill (2005): Management for Engineers, Scientists and
Recommended reading and its availability	Technologists, John Wiley& sons, Ltd, England
	Case study analysis Group work
	Individual presentation: An organization working goal, process and
Hand-in Assignments/ measurement reports	organizational structure
	These tasks cannot be replaced during the exams.
Description of midterm tests	Test

Basics of machine design

in English		Géptervezés	alapj	jai	Level	А						
in English		Basics of ma	chin	e design			Code of	DUEN-MUG-222				
al unit		Institute of T	echn	ology, De	epar	tment of Energy and M	echanical Eng	ineering				
prior learnin	ıg	MUG-211, N	MUC	G-152, MC	JT-1	11						
		Hours per we	ek			D	Creatite	Language of				
Theoretic	al	Practice		Lab		Requirement	Credit	education				
Weekly	2	Weekly	1	Weekly	0							
Half-yearly	10	Half-yearly	5	Half- yearly	0	F	5	Hungarian				
or the subjec	rt	Name		schedule:	Associate Professor							
		Goals, devel	opm	ent objec	tive							
Training objective of the course				The student should know the construction and operation of typical machine parts, components, assemblies and sub-assemblies used in engineering practice. Be able to select standard parts for such units, determine the main dimensions, and design the associated components. Be able to prepare drawing documentation of units using traditional and computer tools. The student will be able to apply the knowledge acquired in Mechanical Engineering I, CAD and Mechanics I to the construction of simple								
					n a l	arge lecture, using lect	ure, Power Poi	nt and overhead				
Practice Small group of up to 25 people, sketching, drafting, calculation exercises Lab												
Typical delivery methods Educational objective (in terms of learning outcomes)				rehensive of enginee e terminol omprehen our field. ledge of g technolo ve knowle wer tools, wledge of limitation characteris ments of n onents use elated cop roduct, pr job accore n, organis ntify routi standard of ld basic n lentifies d practica dard oper	kno ring ogy sive ma ogy, edge med lear ons se an ech ed. mpu oce e an ne p poer ling ting roote prof	wledge of the basic fa , key concepts and theo knowledge of the mai achine design princi control procedures and chanical equipment and ning, knowledge acqui and problem-solving and problem-solving and model the structure banical systems, the des tational and modellin ss and technology design to his/her qualification d carry out independen professional problems, a cls of technical systems cessional problems, on chance in practice.	cts, directions pries related to n theories and ples and me l operating pro iples and struc l tools used. sition, data col g techniques and operation g techniques and operation g principles gn. t learning. t learning. to identify, for inst a theoreti and processes explores and solve them, an ted to mechar tise. Interested	and limits of the your field. problem-solving ethods, machine cesses. etural units of the llection methods, in mechanical of the structural elationship of the and methods of mulate and solve cal and practical formulates the d solves them by				
	in English in English al unit orior learnin Theoretic Weekly Half-yearly r the subjec he course	in English in English al unit prior learning Theoretical Weekly 2 Half-yearly 10 or the subject he course ods (in terms of	in English Géptervezés in English Basics of ma al unit Institute of T prior learning MUG-211, N Hours per we Theoretical Practice Weekly 2 Weekly Half-yearly 10 Half-yearly r the subject Name Goals, devel The student components, select standa associated ca traditional an in Mechanic structures and ods Practice Lab Dasie Knowledge Have a c subject a You knov You have methods Basic k manufact Compreh machines In-depth their et engineeri Understa units and system ca system ca Ability to Ability to them (us backgrou Ability to the course Ability to the course Ability to a the co	in English Géptervezés alap, in English Basics of machina al unit Institute of Techr prior learning MUG-211, MUC Hours per week Theoretical Practice Weekly 2 Weekly 1 Half-yearly 10 Half-yearly 5 or the subject Name Goals, developm he course Goals, developm The student shot components, asses select standard passociated competraditional and co in Mechanical E structures and asses All proj pods Theoretical All proj practice Smathetee All proj prodes Theoretical All proj prodes Theoretical Mudestard passociated competraditional and co in Mechanical E Theoretical All proj prodes Theoretical All proj prodes Theoretical All proj inditional and co Institute and eler Structures and associated competition and co in terms of Knowledge Have a competition and co Mudestard passociated competition and co in tentems of Have a competition and co	in English Géptervezés alapjai in English Basics of machine design al unit Institute of Technology, Deprior learning MUG-211, MUG-152, MC Hours per week Theoretical Practice Lab Weekly 2 Weekly 1 Weekly Half-yearly 10 Half-yearly 5 Half-yearly or the subject Name Dr. Gábo he course Goals, development objec he course Goals, development objec he course Goals, development objec The student should know components, assemblies ar select standard parts for si associated components. B structures and assemblies. Theoretical Final students in projector Practice Small group of Lab All students in projector Practice Small group of Lab (in terms of Knowledge Manufacturing technola (in terms of Knowledge of maufacturing technola (in terms of Knowledge of maufacturing technola (in terms of	in English Géptervezés alapjai in English Basics of machine design al unit Institute of Technology, Depar prior learning MUG-211, MUG-152, MGT-1 Hours per week Theoretical Practice Lab Weekly 2 Weekly 1 Weekly 0 Half-yearly 10 Half-yearly 5 Half- yearly 0 or the subject Name Dr. Gábor Vi 0 he course Goals, development objective The student should know the components, assemblies and sseelect standard parts for such associated components. Be al traditional and computer tools. 'in Mechanical Engineering I, structures and assemblies. pds Theoretical All students in a 1 projector Practice Small group of up Lab All students in a 1 projector projector Practice Small group of up Lab Vou know the terminology You know the terminology, Comprehensive knowledge of manufacturing technology, Comprehensiv	in English Géptervezés alapjai in English Basics of machine design al unit Institute of Technology, Department of Energy and M prior learning MUG-211, MUG-152, MGT-111 Hours per week Theoretical Practice Lab Requirement Weekly 2 Weekly 1 Weekly 0 Half-yearly 10 Half-yearly 5 Half- yearly 0 F r the subject Name Dr. Gábor Vizi Goals, development objective The student should know the construction and ope components, assemblies and sub-assemblies used in select standard parts for such units, determine the n associated components. Be able to prepare drawing traditional and computer tools. The student will be able in Mechanical Engineering I, CAD and Mechanics structures and assemblies. Theoretical All students in a large lecture, using lect projector Practice Small group of up to 25 people, sketchin Lab Habe Have a comprehensive knowledge of the basic fa subject area of engineering. You know the terminology, key concepts and there You have a comprehensive knowledge of the main methods in your field. Basic knowledge of machine design princi manufacturing technology, control procedures and Comprehensive knowledge of the operating princi machines, power tools, mechanical equipment and In-depth knowledge of the control procedures and Comprehensive knowledge of the structure units and elements of mechanical systems, the des system components used. Apply the related computational and modellin engineering. Understand, characterise and model the structure units and elements of mechanical systems, the des system components used. Apply the related computational and modelling engineering. Understand, characterise and model the structure units and elements of mechanical systems, the des system components used. Apply the related computational and modelling engineering. Understand, characterise and practical background necessary to applying standard operations in practice. Attitude Open to learning and absorbing knowledge relar related to his/her qualifications and area of exper-	in English Géptervezés alapjai Level in English Basics of machine design Code of al unit Institute of Technology. Department of Energy and Mechanical Eng prior learning MUG-211, MUG-152, MGT-111 Requirement Credit Hours per week Requirement Credit Credit Weekly 2 Weekly 1 Requirement Credit Half-yearly 10 Half-yearly 5 Half- 0 F 5 half-yearly 10 Half-yearly 5 Half- 0 F 5 5 he subject Name Dr. Gábor Vizi schedule: Code.org 5 schedule: 5 sche				

	Taking responsibility for your own work and the work of others.
	Repetitive parts or units of machinery performing the same function and having a
	similar design - machine components. Definition, grouping, description, description,
Short description of the subject	representation, strength dimensioning, correct construction, operation and maintenance
sentent	of machinery parts. The main machine components or groups to be discussed in detail
content	are: drive and connecting screws, shafts, shaft couplings, couplings, bearings, belt
	drives, gears. In the discussion of the subjects, the emphasis is on the illustration and
	overview of the parts/assemblies.
	Processing theoretical material with guidance 20 %
	Independent processing of theoretical material 20 %
Types of student activities	Task solving with guidance 20 %
Types of student activities	Independent processing of tasks 40 %
	Laboratory measurements under supervision
	Preparation of laboratory reports.
	László Tóth- Tamás Zahola: Mechanical Engineering. Zahra Zahola. Főiskolai Kiadó
Required literature and contact details	Dr. Péter Szendrő and co-authors, Mechanical Engineering BSc. textbook, 2007.
	Mezőgazda Kiadó, Budapest, 758 p.
	Dr. József Őze: Mechanical Elements I/2. I/3. I/4. I/5. I/6. I/7. I/8. manuscripts.1.
	Arpád Zsáry:Machine Elements II., Budapest, 1991.
	György Diószegi: Mechanical Engineering Handbook. Technical Book Publishing
Recommended literature and contact	House, Budapest, 1988.
details	István Majdán: Technical Pocketbook. Technical Book Publishing House, Budapest,
	Géza Nagy: Atlas of Mechanical Engineering. GTE ME Machine Elements Department,
	Budapest, 1991
	4000 SKF Bearing Master Catalogue
Description of the tasks to be	
submitted/measurement reports, other	
reporting	
Description and timetable of the	
workshop	

2024

Production Technology

Subject nome Hungarian				Gyártástechnológia			Level	А						
Subject name		English		Production Technol	log	у			Code	DUEN(L)-MUG-252				
Responsible educat	tional u	ınit		Institute of Enginee	rin	ıg								
Name of prerequisi	ite subj	ect												
Tuno		Class hours	/ w	veek				Paquiromonto	ECTS	Language of				
Type		Theoretical		Practice		Lab		Requirements	ECIS	instruction				
Full time course	150/39		2		1		0							
Long distance course	150/15	per Semester	10	per Semester	5	per Semester	0	E (Exam)	5	English				
Teacher responsibl	e for su	ibject		Name		Dr. Gábor	·Vi	zi	Position	College Professor				
^				The students shall	lea	rn the bas	ics	of production	technology	. Cutting: the students				
				shall learn the bas	ics	of cutting	g ai	nd its results.	Knowledg	e of the basic cutting				
Educational goal (c	compete	encies to be		processes. Calculat	tio	n and sel	ecti	on of the te	chnological	data. Calculation of				
acquired)				machine time and	sta	ndard time	e no	orm and deter	mination of	f costs. Knowledge of				
				other cutting processes.										
					In	a classroo	om v	with the use of	projector o	r computer in each				
					In	a classroo	m	with the use of	projector o	r computer in each				
Typical transfer ways				Practice	se	minar with	n ma	ax. 20 students	s	a computer in each				
				Lab Presentations and exercises in a cutting workshop										
				Other										
				Knowledge										
				Students will										
				know the basic terms of cutting processes										
				know the type and features of cutting										
				able to do calculation of machining time and cost analysis										
Requirements (exp	ressed	in education	al	able to do calculation of dimensional chain										
results)				Ability										
				They are able to use the obtained skills even few years later, in real situations										
				Attitude										
				Open-minded for the mechanical innovation on their field.										
				Autonomy and Responsibility										
				Responsible for their results.										
				Cutting processes. Type and features of cutting. Technologies of turning. planing.										
				boring, milling, grir	ndi	ng. Calcul	atio	on of allowance	es, feeds, sp	eeds, number of cycles				
Brief description of	f the su	bject conten	t	in case of every	pr	ocess. Ca	lcu	lation of ma	chining tin	ne and cost analysis.				
				Unconvencial cutt	ing	processe	s,	sawing, broad	ching, three	ading, gearing. EDM				
				technologies. Deter	mi	nation of s	stoc	k. Calculation	of dimensio	onal chain.				
				Assimilation of the	the	eoretical m	nate	rial with						
				assistance: 5 % Ass	im	ilation of t	the							
	,· ·,			theoretical material	wi	thout assis	stan	ce: 40 %						
Forms of student activity			Problem solving wi	th	assistance	: 15	%							
		Problem solving wi	the	out assistar	nce:	40 %								
				1. Manufacturing	Гес	hnology ((Ma	nufacturing n	rocesses) R	K.RAJPUT				
				LAXMI PUBLICATIONS (p) LTD 113 Golden House Darvagani New Delhi-										
Compulsory readin	ig and i	ts availabilit	v	110002. EMT-0750)-3	50-ATB O)F N	IANUFACTI	JRING TEC	Э.				
	0		5	2. Production Tech	nno.	logy, HM	ТВ	angalore. Tata	McGraw-H	Hill Education. 2001.				
				ISBN-13: 978-0-07	-09	96443-3, IS	SBN	N-10: 0-07-090	6443-2	······································				

	3. Production engineering, K.C. Jain, A. K. Chitale, 2010, PHI learning Private Limited, New Delhi, ISBN-978-81-203-3526-4
Recommended reading and its availability	Manufacturing process-I, H.S.Bawa, 2004, Tata McGraw-Hill Publishing Company Limited, second reprint 2006. ISBN 0-07-053525-6

2024

Marketing

In Hungarian				Marketing	Szintje	А								
Subject name		In English		Marketing					Level	А				
Subject code				DUEN-TVV-215						•				
D				Institute for Social Science	ces									
Responsible education	ionai	umi		Department of Management and Enterprise Sciences										
Name of Mandatory	/ Prel	iminary Stu	ıdy											
Number of Lessons					Dequinemente	Credits	Language of							
		Theoretical	1	Practice		Lab		Requirements	(ECTS)	Education				
En 11 dinner	150/		1		2		0							
Full-time	39		1		2		0	м	5	E				
Companyandanaa	150/		5		10		0	1/1	5	English				
Correspondence	15		5		10		0							
Teacher responsible	e for t	he course		Name		Dr. Cath	erin	e Odorige	Position					
				The curriculum supports t	he s	student's	mas	tery of marketin	ng concepts	and highlights				
				their interconnections with	h di	fferent d	iscip	olines. During th	ne course, st	udents				
				understand and apply the	con	cepts of t	the r	narket, the tools	s of marketing	ng				
Educational goals				environment analysis, mai	rket	sharing	crite	eria and method	ologies, bec	ome familiar				
Educational gouis				with the purchasing decisi	on	process a	and t	he factors influ	encing custo	omer behavior.				
				Students understand the diversity and variations of marketing tools, and become										
				proficient in using the most important marketing techniques and institutional										
				marketing communication	is.									
				Theoretical	Fli	pchart, b	lack	board and other	multimedia	a equipment in				
					1.1 11									
Typical delivery methods				Practice	Fli	pchart, b	lack	board and other	multimedia	a equipment in				
				T 1	sm	aller sem	nnar	rooms suitable	for group w	vork.				
				Knowledge	4									
				comprehend the basic concepts used in marketing and PR										
				comprehend the basic concepts used in marketing and PK										
				know the basic tools of marketing and recognize the relationships among them										
				interaction with the comp	anv	's market	ing	and PR activitie		nent and then				
				know and appropriately at	any only	z market	rese	arch methodolo	gies					
				Ability	<u> </u>		1000		8.00					
				Students will be able to:										
				Use and apply the basic te	rms	s and voc	abu	lary of the profe	ession with o	confidence				
				Synthetize and organize th	neir	knowled	lge a	and apply it in th	he appropria	te situations				
				Examine business problem	ns v	vith a ma	irket	ing approach						
				Analyze the market of a p	rod	uct or sei	rvice	e						
Requirements				Detect correlations betwee	en s	trategic a	and o	operational mar	keting proce	esses.				
				Detect the relationship and	d in	teraction	s be	tween the comp	any, its cus	tomers and				
				business partners										
				Attitude										
				Students should be:										
				Open to classroom case st	udi	es, and to	o the	active interpret	tation of dis	cussed				
				situations.										
				Sensitive and critical towa	ards	theoretic		nd practical inf	iovation					
				Susceptible to development opportunities for exploitation.										
				Autonomy and responsit	ווונ	ly								
				Responsible for his/her ov	vn (evelopm	ient.	tudantal- (o colu- 4-	licence 1				
				problems	lor	and tello	JW S	indents, seeks to	o solve the c	nscussed				
				Feel responsible for the de	wal	onment	of Þ	is/her working	environmen	t				
				r cer responsible for the de	_vei	opment (лп	15/HEI WUIKING	environnien	ι				

	Concepts and instruments of marketing, main communication channels and
	strategies. Components of the marketing mix, market participants, the basic
Brief description of the subject content	processes of marketing management. Consumer behavior, B2B markets, the basic
	methods of marketing research. Pricing, product development, brands, branding and
	challenges of contemporary marketing
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Group
Activity forms of students	work, Role play
	Kotler, P Wong, V Saunders, J Armstrong, G.: Principles of Marketing, 4th
Compulsory reading and its availability	European Edition, Pearson, 2005, DUE Library
	Kotler, P. – Armstrong, G.: Marketing: An Introduction, Pearson, 2015
Recommended reading and its	Kotler, P. – Kartajaya, H. – Setiawan, I.: Marketing 4.0: Moving from traditional to
availability	digital, Wiley, 2017
	Palmer, A.: Introduction to marketing, Oxford University Press, 2003
	Group work (Week 11): Creating and presenting the marketing plan of a chosen
	company. The marketing plans have to be submitted the day before the presentation
Hand in Assignments/measurement	the latest.
raporta	
reports	Individual work (Week 7): Students have to analyse their own consumer habits (5-
	10 pages) and behaviours, and submit it in written form. The essay should contain
	citations from relevant scientific literature.
	The goal of the final test is to assess the students' knowledge and comprehensive
Description of midterm tests	understanding on the main marketing concepts, tools and strategies, and to measure
Description of midterin tests	and evaluate their knowledge in a system-wide context through complex problem
	solving. (Week 13.)

Operations and Quality Management

Subject name	Termelés és minőségm	Szintje	А										
	In English		Operation and Quality		Level	Α							
Subject code			DUEN-TVV-219										
Responsible education	al unit		Institute for Social Sciences										
			Department of Communication and Media										
Name of Mandatory P	reliminary Study												
Number of Lessons			- ·	Requirements	Credits	Language of							
	Theoretical		Practice	-	Lab	<u>`</u>	(ECTS)	Education					
Full-time 15	0/39	1		2	0	М	5	English					
Correspondence 15	0/15	5		10	0			5					
Teacher responsible fo	or the course		Name		Dr. Anita Va	rga	Position	College Professor					
Educational goals		The goal of this course is to prepare the students for efficient management of the production and quality assurance. It introduces the engineering business management students to the definition, scope and role of production management in system approach. In frame of this fundamental topic the students learn the Function Matrix and its application, the basic production systems and layout and their features, the basics of the marketing and technical life cycle management of product and related production technology. To understand the production management issues, the course contains the summary of the definition, methods and hierarchical levels of control, the stages of the product structure. The second part summarize the quality management systems, standards and the history of main quality standards and some hard and soft techniques of the quality management.											
Typical delivery metho	ods		Practice work with the use of projector or computer in each seminar.										
Requirements			Knowledge overviews the system of has a strategic and syst knows the principles, p management teams. Ability Students will be able to applies the theoretical manages the system co sketches the stages of of implements the ISO 90 regulates basic-level proverviews the document manages changes, understands the profess applies the definitions Attitude opened for the innovat pursue continuous self Able to solve problems Can tackle problems as Self-training ability.	of p compoli- bio componi- com	roduction an -oriented thin cies and proc owledge syste conents indiv- trol, standard, esses, cion of the qu nal literature, <u>he specializa</u> s of the speci provement one. sponsible per	d quality manag nking, resses of product ematically in pra- idually and in s ality system, alization alization	gement, ction and qu actice, ystem, ally.	ality					

	Autonomy and responsibility
	responsible for self-training
	co-operates with colleagues
	search the solutions for problems
	responsible for the development of work environment
	takes responsible part in forming professional opinions and its explanations
	Definition of production, production management, interpretation in system
	approach. Production processes and process structures. Product structure.
	Production structure. Construction, manufacturing, industrial specialties.
	Technical, economic, human and IT factors of production. Price, cost and profit
Brief description of the subject content	functions of production. Basic documentation of the production management.
	Quality, value, value hierarchy. Top management activities related to the
	quality. Components of the quality policy. Practical factors of the enterprise
	quality related activities. Quality management of services and business
	processes. Definition and parts of TQM and TVM.
	Frontal work: 40 %
Activity forms of students	Individual or group work: 40%
	Test: 20%
Compulsory reading and its quailability	[1] KUMAR, S. Anil. Production and operations management. Second edition,
Compulsory reading and its availability	ISBN : 978-81-224-2425-6, New Age International, 2008.
	[2] Graeme Knowles: Quality management, ISBN 978-87-7681875-3,
Recommended reading and its availability	BookBoon, 2011.
Hand-in Assignments/ measurement reports	Students have to write an industrial case study in 20-25 pages.
Description of midterm tests	Mid-term written exams (2 times): theoretical questions, practical tasks.

2024

Strategic Planning

Subject name	Stratégiai	Tervezés	Szintje	А							
	In English	Strategic	Planning		Level	А					
Subject code		DUEN-	TVV-250								
Responsible educational ur	nit	Institute for Social Sciences									
Name of Mandatory Prelim	ninary Study	DUEN-T	VV-114 Mai	nage	ement	igen			-8		
N N	umber of Lesson	s per seme	ester					Credits	Language of		
	Theoretical	1	Practice		Lab		Requirements	(ECTS)	Education		
Full-time 150/39	1			2		0	E (Exam)	5	English		
Teacher responsible for the	course	Name		10	Dr. habil Raicsány	l Mó /i-M	nika olnár	Position	College Teacher		
Educational goals	The goal of the course is to develop the essential skills required of employees at the workplace and to expand students' planning skills. The course is designed to familiarize students with the planning processes taking place in work organizations on key information. Provided by the knowledge of the course enables the students to the need for long-term planning and the importance of understanding claim. In practical terms, students will be able to interpret theoretical knowledge of the relevant relationships to recognize.										
		Theoretic	al	In a eac	a classro h lecture	om v e.	with the use of p	projector an	d computer in		
Typical delivery methods		Practice			a classroo h semina	om v ar.	with the use of p	projector and computer in			
		Lab -									
	 Students as potential manager know and understand: the difference between the traditional and the strategic management approach the main steps of the strategic management process and apply management methodologies the implementation of the required change management strategy, particularly sociological and psychological aspects of the organization 										
Requirements	Ability Students Attitude	will be able to use the choose apply th approad draw co Structu effect ro Good negoti	con the ne n ch orred, red, elat:	cepts of most sui nethods c ct conclu systemic ionships.	area table of ap sion c pro	of specialty e method in terr pproaches based as from the anal- oblems identifie	ns of busing on the theo yzes ed, to identif and have en	ess logic pretical fy cause and mpathy, i.e.			
	 they can identify with the representatives of the other side and accept their opinion. Open to accommodate new innovative approaches. Avoids the stereotypes. Not think schemas. Susceptible development opportunities for exploitation 										

	Autonomy and responsibility							
	In professional questions negotiators can play the role of a decision-maker an are able to solve problems alone. They can tackle problems as responsible persons, i.e. can decide if it is a need in a certain negotiation phase or situatio to cooperate with others.							
Brief description of the subject content	The course familiarizes students with definition the strategic position of the organization (environment-, resources and analysis of the stakeholder). The strategic decision. Corporate and business level strategies. The strategic portfolio analysis. Implementation of the strategy, organizational development and change management.							
Activity forms of students	 30% Student-workbook 30% mid-term test 30% final test 10% Individual presentation 							
Compulsory reading and its availability	 Robert M. Grant & Judith Jordan (2012) Foundations of Strategy, John Wiley & Sons, Inc. DUE Library Materials on MOODLE 							
Recommended reading and its availability	 Art of War, Sun-Tzu (e-book) Blue Ocean Strategy, Kim Chan & Renee Mauborgne, Harvard Business Review Press; 1st edition 2005. Business Model Generation, Alexander Osterwalder & Yves Pigneur 2010. Hand-outs from the lecturer, case studies, additional materials (Moodle) 							

2024

Informatics

	In Hungarian	Informatika		Level	А						
Subject name	In English	Informatics DUEN 010									
Subject code											
Responsible educational u	Institute of Inform	natics									
Name of Mandatory Preli	minary Study				-						
Number of Lessons		•			Dequinemente	Credits	Language of				
	Theoretical	Practice	Lab		Requirements	(ECTS)	Education				
Full-time 150/39	0	0		3	М	5	Enalish				
Correspondence 150/15	50	0		15	(Midterm mark)	5	English				
Teacher responsible for th	ie course	Name	Dr. M	ariann V	Váraljai	Position	College Professor				
Educational goals	Basic ICT knowledge. Students competences at the end of the course: use of a graphical operating system, a word processor, creating worksheets, browsing the internet, writing emails, creating presentations.										
		Theoretical									
		Practice									
Typical delivery methods		Lab In a classroom with the use of projector or computer in each seminar. Computer based exercises. PowerPoint presentations. Individual tasks									
		Students get to know the required theoretical ICT knowledge and may use certain softwares as a semi-advanced user: operating system, MS Word, MS Excel, MS PowerPoint and Prezi. Ability They are able to use the obtained skills even few years later, in real									
Requirements (expressed outcomes/competencies to	in learning be acquired)	Attitude Strengthening the motivation for individual learning. Openness for new techniques and team work.									
		Autonomy and responsibility In professional questions, the students can play the role of using ICT tools for problem solving. They can tackle problems as responsible persons, i.e. in a certain situation, they can decide if there is a need to cooperate with others.									
Brief description of the su	ıbject content	 Topics: Operating systems in general, MS Windows (features, attributes, keyboard shortcuts, built-in applications, using zip files, file tattributes/write-protected files) MS Word (main attributes, using macros, typography) MS Excel (most important functions, creating charts) Creating presentations using Prezi and PowerPoint 									
Activity forms of students	3	Lectures, using the Individual tasks (ne com (60%).	puter wi	th teacher superv	vision (409	%).				
Compulsory reading and i	its availability	1. PCs For Dummi ISBN: 978-0-470-1	es Quic 1526-8	k Refere	nce, 4th Edition, B	y Dan Goo	kin				

	2. Microsoft Office 2003 For Dummies, By Wallace Wang ISBN: 978-0-7645-3860-5
	3. Parhami, Behrooz: Computer Architecture, ISBN 10: 019515455x ISBN 13: 9780195154559
Recommended reading and its	Microsoft Office Official Tutorial and examples (available on the
availability	internet).
Hand-in Assignments/ measurement	
reports	
	There will be 3 compulsory midterm tests. First test: MS Windows,
	Word, data protection, email. Second test: MS Excel. Third test:
Description of materm tests	Presentation (Prezi and PowerPoint). All tests will be computer-based
	exercises. Duration: 60 minutes each.

2024

Basics of Finance

	In Hungarian Pénzügytan alapjai Level A												
Subject name	In English	Basic of Finance		DUEN-TKT-									
	in English	Dasie of Finance		114									
Subject code													
Responsible educational	unit	Institute for Social So	cien	ces									
responsible educational	unn	Department of Econo	omic	s									
Name of Mandatory Prel	iminary												
Study						1							
Number of Lessons	L	L .		L .		Requirements	Credits	Language of					
	Theoretical	Practice	(ECTS)	Education									
Full-time 150/39	1		5	English									
Correspondence 150/15	5		10		0								
Teacher responsible for t	he course	Name		Dr. Péter l	Novo	oszáth	Position	Associate Professor					
		By the end of the cou	ırse	the student	is e	xpected to underst	tand the esse	ntial financial					
		concepts and process	es a	nd to be pr	epar	ed for more advan	ced econom	ic, business and					
		financial studies. The	e coi	arse covers	a w	ide range of topics	s related to the	ne basic					
Educational goals		concepts of finance,	such	as the role	e of t	he financial assets	s, the financi	al institutions					
Educational goals		and the financial syst	em	in modern	econ	omy. They learn a	about how th	e financial					
		markets, the public b	udg	et processe	s and	d the international	financial sy	stems are					
		functioning. They see the links between the domestic and international financial											
		processes. They possess the basic toolbox for performing financial calculations.											
		Theoretical In a classroom with the use of projector or computer in each lecture.											
Typical delivery method	S	Practice In a classroom with the use of projector or computer in each											
		semmar.											
		Knowledge											
		Students as notential financial professionals will know:											
		the terminology, types and principles of financial markets institutions and decisions											
		the steps of effective financial performance measurement											
		how to implement public finance and international financial information in individual											
		or collective financial decision situations.											
		how to create and claim value.											
		Ability											
		Students will be able to:											
		collect and analyze financial information,											
		make financial decisions in their professional and private activities,											
Paguiramanta (avaragad	l in looming	apply professional experiences learnt during their economic, business, and financial											
outcomes/competencies	to be	activities to improve their financial decisions and the effectiveness of their activities.											
acquired)		Attitude											
acquireu)		Students are expected	d to	be									
		good at understandin	g fir	nancial situ	atio	ns, to become well	l-educated fi	nancial					
		professionals with en	npat	hy, i.e. the	y car	n identify and solv	e financial s	ituations with					
		the other players of f	inan	cial marke	ts an	d institutions, bas	ed on financ	ial reasoning;					
		competent, developm	nent-	-oriented fi	nanc	cial professionals,	who respect	their					
		counterparts, are trustworthy and purposeful;											
		open and willing to d	1scu	iss all aspec	cts o	t tinancial probler	ns which the	y face in their					
		activities, as well as	expr	ess their of	01110	on, but without dis	closing any	sensitive					
		information about the	e eco	onomic, bu	sine	ss and financial ci	rcumstances	of the company					
		or the institution whe	ere tl	ney are wor	rking	5.							
		Autonomy and resp	onsi	ibility									
		In professional finan	cial	questions,	stude	ents							

	can understand complex financial situations,					
	play the role of a decision-maker;					
	are able to solve basic financial problems alone;					
	can tackle problems as responsible persons, i.e. can decide if there is a need in a					
	certain financial situation to cooperate with others.					
	The course makes students acquainted with the main financial concepts, financial					
Brief description of the subject	markets, institutions, and decisions. The course presents students introductory issues					
content	of public finance and international finance, contributing to the development of their					
	financial thinking skills.					
	Discussing theoretical financial concepts and case studies/applications under the					
	tutor's guidance: 30%					
Activity forms of students	Solving exercises under the tutor's guidance: 40%					
	Learning course material and doing exercises independently: 30%					
Compulsory reading and its	Lecturer's notes available on MOODLE					
availability	Study materials provided on MOODLE					
	Pamela Peterson – Drake-Frank J.Fabozzi: The Basics of Finance, An Introduction to					
	Financial Markets, Business Finance and Portfolio Management, The Frank J.Fabozzi					
	Series, 665 pages, Wiley Online Library, Elérhető:					
Recommended reading and its	http://elib.peaceland.edu.ng:8383/greenstone3/sites/localsite/collect/					
availability	peacelan/index/assoc/HASHc0b1.dir/doc.pdf					
	Eddie McLaney- Business Finance, Theory and Practice, 8th Edition, Pearson					
	Education, Letölthető:					
	http://www.books.mec.biz/tmp/books/E58R5U5EUTFE1SF8SBF3ZSBVUI16N6.pdf					
Hand-in Assignments/ measurement	Submitting the study material of the presentations delivered in the seminars (10 pages,					
reports	type space: 1.5, font size: 12, Times New Roman)					
	The midterm in-class tests will take 120 minutes. The composition of each midterm					
Description of midtarm tasts	test: quiz questions with true or false and open ended questions on theory (40%),					
Description of midterin tests	calculations and problem solving (60%). Solutions will be accepted only with exact					
	demonstration and comments on how the student obtained his/her results.					

Ergonomics and health promotion

Subject name	In Hungarian	Ergonóm	ia és egészségf	Szintje	А					
	Ergonom	ics and health	Level	А						
Subject code		DUEN-TGT-214								
Responsible educational u	nit	Institute for Social Sciences Department of Management and Enterprise Sciences								
Name of Mandatory Prelin	ninary Study	-						_		
	Number of l	Lessons				Requirements	Credits	Language of		
	Theoretical]	Practice		Lab	requirements	(ECTS)	Education		
Full-time 150/39	1		2	2	0	М	5	English		
Teacher responsible for the	e course	Name	1		Dr. habil Mó	nika	Position	College		
Educational goals	To enable ergonomi safe and ergonomi knowledge	Rajcsányi-Molnár Teacher To enable the students to improve the man-machine-environment system, ergonomic aspects of the interpretation, the effective design and operation of safe and convenient to use human. The student will be familiar with: The ergonomic, security and health-saving regulations in workplaces, and the main								
Typical delivery methods	1	Theoretic	cal I e F	n a eacl Flip	a classroom v h lecture. ochart, blackl	with the use of p	rojector or	r computer in ia equipment in		
		ractice	S	ma	aller seminar	rooms suitable	for group	work		
		Lab		-						
	 Students will have the basic terms of ergonomics and how to apply these into practice, know the features and correlations of strain and stress know the characteristics of sensation and perception, know the ergonomic aspects of tool design, know the special features and planning conditions of the manmachine-environment system, know the security and health-saving regulations in workplaces. the student knows the concept of health promotion, the possibilities of individual skill development, and the requirements of creating a healthy environment. 						hese into ne man- kplaces. possibilities of creating a			
Requirements	 Ability Students will be able to evaluate and plan of the man-machine-environment s ergonomic aspects, to use in practice the learnt planning rules and methods, to determine and maintain safe and healthy working cor to share their knowledge, experience so as to create more safer and more comfortable conditions. Attitude They are open and willing to discuss all points of the cate express their opinion. For them it is important to maintain their and others' sa health. 					systems from s, inditions, ore effective, ases, as well as afety and nic facilities				
	 and environments both at home and in workplaces. Obey the relevant safety,- health regulations and ergonomic requirements. 									

	Autonomy and responsibility
	Students feel responsibility for both their development and environment. They cooperate with each other. They have sensibility to find possible resolving opportunities for problems.
Brief description of the subject content	The interpretation of ergonomics, the conceptual system, the development of history and social usefulness. Application of the ergonomics and features, The strain and stress correlations. The relationship between stress and performance. The man, as a consumer and user features attitudes, perception, cognition, cognitive processing, and anthropometry. The man-machine interface system /tool design, management/. Design and Selection. The man-machine- environment system characteristics, the design conditions. Physical environment from ergonomic aspects. Safety and healthcare issues in organizations. The concept and purpose of health development, the requirements for creating a health-supportive environment, and learning the legal and economic background conditions.
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Essay writing
Compulsory reading and its availability	 McCauley-Bush, Pamela (2012) Ergonomics: foundational principles, applications and technologies. Boca Raton: CRC Press, ISBN 9781439804452, DUE Library Materials on MOODLE
Recommended reading and its availability	• Kroemer K, H. K. E. (2001): Ergonomics: How to design for ease and efficiency, Upper Saddle River, NJ, Prentice Hall, DUE Library

Subject name		In Hungarian		Szakdolgozat – Kutat	Szintje	A									
Subject name		In English		Thesis – Research me	Level	А									
Subject code				DUEN-TVV-090											
D 11 1	• 1	•,		Institute for Social So	cien	ces									
Responsible educat	tional u	nit		Department of Econo	mic	5									
Name of Mandator	y Prelir	ninary Study													
Number of Lessons	3	•••		1					Credits	Language of					
		Theoretical		Practice		Lab		Requirements	(ECTS)	Education					
Full-time			1												
Correspondence			5		0		0	Signature	-	English					
Teacher responsible	e for the	e course		Name		Dr. Ani	ita Va	urga	Position	Collegue Professor					
				The goal of the course	e is t	o devel	op th	e essential resea	arch skills re	equired to					
				thesis writing, that is	a co	mpulsor	v tas	k for graduation	. The cours	e enables					
				students to find comp	rehe	nsive so	olutio	ns to practical r	problems, as	s well as to					
				present the findings o	f the	eir thesis	s rese	arch in a clear a	and convinc	ing way, both					
Educational goals				in oral and in writing.	The	e course	fami	liarizes students	s with vario	us ways of					
				conducting a research	, ma	iking a c	questi	onnaire, carryii	ng out a qua	litative					
				interview research. Th	he co	ourse wi	ill tea	ch students to r	ote down th	neir research					
				results either in a descriptive or numerical way.											
				Theoretical	gro	oup activ	vity								
Typical delivery me	ethods			Practice											
				Lab											
				Knowledge											
				Students as potential graduates know:											
				how to create a questionnaire											
				how to analyze and critically evaluate secondary literature											
				the most important terminology and definition required for a successful thesis											
				writing											
				the most important scientific interconnections within the field of economics											
				Ability											
				Students will be able	to:										
				analyze the knowledg	e sy	stem tha	at cha	racterizes econ	omic resear	ch					
Requirements (exp	ressed i	in learning		learn, understand and	app	ly the li	brary	resources and t	the scientifi	c literature of					
outcomes/competer	ncies to	be acquired)		the field of economics											
				Attitude											
				Successful researchers have an open-minded and impartial attitude towards											
				newest findings, are good listeners and thinkers at the same time. Have an											
				opinion on newest trends and a critical view on old findings of economy.											
				Autonomy and respon	isibi	lity									
				Independently analyz	e pro	ofession	al qu	estions and thin	k through s	científic					
				findings.			, .	11							
				In professional questi	ons	1s chara	cteriz	ed by cooperation	ion and resp	onsibility					
				towards the members of professional sphere. Students can tackle problems alone											
				they encounter throug	gnou	t the res	earch	i pnase.	1	1 1 1 751					
				The course familiarizes students with news trends of research methodology. The											
				course presents the available thesis writing regulations, norms and criteria in											
Brief description of	f the cul	hiect content		The course contains a	the	rough d	escrit	ntion and explai	nation of car	mnling					
brief description of	i ine sui	ojeci coment		research question type	es o	nen end	ed ar	lestions and res	earch scales	The planning					
				and structuring of our	alitat	ive inte	rview	research Data	analysis re	search					
				evaluation			10 //	Dutu							
Activity forms of st	tudents			Research data analysi	s										

Thesis – Research Methodology TVV

	Frontal work						
	Individual or group work						
	Weekly consultations						
Compulsory reading and its availability	Babbie, Earl (2013) The Practice of Social Research. Wadsworth 13th edition						
Pasammandad reading and its availability	MURRAY, Rowena (2011): How to Write a Thesis. 3rd ed. Milton Keynes:						
Recommended reading and its availability	Open Univ. Press 384 p. ISBN 978 0 335 24428 7.						
	Weekly personal consultation with the supervisor						
	Discussion about each prepared chapter						
Hand in Assignments/massurement reports	Submission of thesis until the deadline required in the University's exam						
Hand-III Assignments/ measurement reports	schedule						
	Preparation of the research questionnaire.						
	Defining the hypothesis.						
Description of midterm tests	During week 13 a presentation about a chosen topic.						

2024

Project Management

		In Hungaria	ı	Projektmenedzsment					Level	А			
Subject name		In English		Project Management Code DUEN-T 116									
Subject code													
Responsible education	onal ur	nit		Institute for Social Sciences Department of Management and Enterprise Sciences									
Name of Mandatory	Prelin	ninary Study											
Number of Lessons	per sen	nester						.	Credits	Language of			
	•	Theoretical		Practice	(ECTS)	Education							
Full-time	150/39		1										
Correspondence	150/15		5		10		0	м	5	English			
Teacher responsible	for the	course.	-	Name		Dr Moł	nama	d Saleh	Position				
reacher responsible	ior uie	course		The goal is to develop	the	e followi	no st	udent skills	robition				
				Project oriented leader	shi	n	115 50	adont skins.					
				Construction project o	roa	P nization	s						
				Project configuration	iga	mzanon	5						
				Management of project	t n	hases							
Educational goals				Process skills	r pi	ilases							
Educational goals				Project documentation	CV	stem der	alon	ment					
				Project controlling and	l m	onitorin	a eve	tem configurati	on				
				Change management		onnorm	g sys	tem comgutati	011				
				Change management									
				Project culture to achieve organizational									
				System approach	In	a classro	omu	with the use of r	rojector ar	d computer in			
				Theoretical each lecture.									
Typical delivery me	thods			Practice In a classroom with the use of projector and computer in each seminar.									
				Lab									
				Knowledge									
				Students as potential project member or manager know:									
				the scope of project management is essential, comprehensive facts, directions									
				and boundaries									
				the project management professional vocabulary									
				techniques and methods used in project management									
				the project life cycle phases									
				Ability									
				Students will be able to:									
				group collaboration and cooperative problem solving									
				approach multilateral professional issues									
				use and understand the literary sources of the project management field									
Requirements				manage a variety of resources									
1				Attitude									
				Good negotiators are patient, well-educated and have empathy, i.e. they can									
				identify with the representatives of the other side and accept their opinion									
				Open to accommodate new innovative approaches									
				Avoid using schemes									
			Susceptible to development opportunities for exploitation										
			Consider all of the professional issues										
			An equal partner in co-operation with professional										
				Autonomy and respo	nsi	bility							
				In professional questic	ns	, negotiat	ors c	an play the role	of a decisi	on-maker and			
				are able to solve proble	em	s alone.	Thev	can tackle prol	olems as re-	sponsible			
				persons, i.e. can decide if it is a need in a certain negotiation phase or situation									

	to cooperate with others.
	The course familiarizes students with different between project and routine
Brief description of the subject content	work. Learning about the project design and realization methods. The features
	of project management.
	Max 10% for one individual presentation during the semester
A ativity forms of students	Max 20% for group work
Activity forms of students	Max 30% for midterm test
	Max 40% for final test
	Samuel J. Mantel (2008) Project Management in Practice,, International Student
Compulsory reading and its availability	Version, 4th Edition, John Wiley & Sons, Inc. 2011. 4th Edition, DUE Library
	Materials on MOODLE
	Kerzner, Harold (2013) Project management: a system approach to planning,
P eacemmended reading and its availability	scheduling and controlling, 11th ed Hoboken: John Wiley & Sons, DUE Library
Recommended reading and its availability	A Guide to the Project Management Body of Knowledge (PMBOK® Guide)
	Project Management Institute 2013. 5th Edition (e-book)
Hand-in Assignments/ measurement reports	Group work presentation, individual presentation
Description of midterm and final tests	Multi choice questions

Environmental Protection and Energy Management

Hung		Hungarian		Környezetvédelem	és (energiaga	Level	А					
Subject name English				Environmental Protection and Energy Management Code DUEN(L)-M									
Responsible educat	tional u	init		Institute of Engineering									
Name of prerequisi	te subi	ect		6		0							
1 1 1 1	J	Class hours	/ w	/eek						Language of			
Туре		Theoretical		Practice	Lab		Requirements	ECTS	instruction				
Full time course	150/39		2		0		1						
Long distance	1 50 /1 5	per	1.0		_	per	~	М	5	English			
course	150/15	Semester	10	per Semester	0	Semester	5			Ū.			
Teacher responsibl	e for su	ibject		Name		Dr.Endre	Kis	s	Position	College Teacher			
		• • • 1		Students will get	aco	quainted	with	h the basic p	principles a	and general issues of			
Educational goal (c	compete	encies to be		environmental prot	ect	ion, the	tech	nologies of a	batement a	nd the elimination of			
acquired)				pollutants.									
					In	a classroo	om v	with the use of	projector o	r computer in each			
				Ineoretical	lec	cture.				_			
				D (In	a classroo	om v	with the use of	projector o	r computer in each			
Typical transfer wa	iys			Practice	sei	minar with	h ma	ax. 20 students	3	_			
				Lab	Pre	esentation	is an	d exercises in	a workshop	0			
				Other									
				Knowledge									
				Students will									
				know the basic term	ns c	of cutting	proc	cesses					
				know the type and f	eat	tures of cu	ıttin	g					
				able to do calculatio	on o	of machin	ing	time and cost	analysis				
Requirements (exp	ressed	in education	al	able to do calculation of dimensional chain									
results)	105500	in education	ui	Ability									
i courto)				They are able to use the obtained skills even few years later in real situations									
				Attitude									
				Open-minded for the mechanical innovation on their field									
				Autonomy and Responsibility									
				Responsible for their results									
				Basics of ecology. The purpose and fundamental issues of environment protection									
				The biological and geological environment Cycles The athmosphere The most									
				inne biological and geological environment. Cycles. The athmosphere. The most									
				properties of dust of	പി	ection Section	-ttlii	ng chambers a	and collecto	ors with flow direction			
				transformation Cvc	lor	nes Basic	s of	hag filters On	erating and	cleaning of hag filters			
				Introduction of electrostatic precipitators. Bag filters with electrostatic charging and									
				their possibilities of	ar	plications	s. El	ectrostatic pre	cipitation w	with pulse energisation.			
Brief description of	f the su	bject conten	t	abatement and dec	con	nposition	of	gases. Absor	prion and	absorption processes.			
				Scrabbers. Oxidati	on	method	s. F	Burning tech	puon and	dor abatement. The			
				measurement of air	pc	ollution. T	The	properties of 1	natural wate	ers and their pollution,			
				self cleaning. Wate	r tr	eatment t	echi	nologies and t	heir equipn	nents. The pollution of			
				soil. Waste and wa	iste	treatmen	it. N	Joise and vibr	ation as en	vironmental pollution.			
			Radioactive pollution	on.	Basics of	ene	ergy managem	ent. Renewa	able				
				energies.									
				Assimilation of the	the	eoretical n	nate	rial with					
				assistance: 5 %									
Forms of student ad	cuvity			Assimilation of the	the	eoretical n	nate	rial without as	sistance: 40) %			
				Problem solving with assistance: 15 %									

	Problem solving without assistance: 40 %
Compulsory reading and its availability	 Ecology and Environmental Protection, selected chapters (on O drive) Environmental Science Toward a Sustainable Future Richard T. Write, Bernard J. Nebel, Prentice Hall
Recommended reading and its availability	 The Biosphere, Ian Bradbury, Belhaven Press Air Pollution, Its Origin and Control, Kenneth Wark and Cecil F. Warner, Harper and Row Hazardous Waste Management Michael D. LaGrega, McGraw Hill Drinking Water Quality, N.F. Gray, Wiley

Thesis writing- MMENBSC

Subject name	Szakdolg	gozat MMENBSC	Szintje	А							
Subject name	In English	Thesis w	riting MMENBS	Level	А						
Subject code		DUEN	DUEN-TVV-091								
Responsible educational ur	nit		Institute for Social Sciences								
			Department	of Managen	nent and Enterp	rise Science	es				
Name of Mandatory Prelin	hinary Study	Thesis re	esearch – research	n methodolog	gy TVV-090		L .				
	Number of	of Lessons	D (TI	Requirements	Credits	Language of				
Eull time 150/12	1 neoretical	0	Practice	Lab	_	(ECIS)	Education				
Correspondence 150/15	1	0	0		S (signature)	15	English				
Teacher responsible for the	e course	Name	U	Dr. Anita Va	arga	Position	College Professor				
Educational goals		To enabl stress, ar By the er main pro Set the ta prelimin recomme expected manage	To enable the students to the practical approach to complex problems, relieve stress, and awareness of written and oral, persuasive presentation, presentation. By the end of the semester, students should be able to: - identify problems, the main problem is the selection - to discover the cause of the problem analysis, - Set the target to be achieved, and the award criteria - alternatives / solutions of preliminary proposals drawn up - to evaluate selected alternatives / recommendations of the "best", decision to initiate, and to demonstrate the expected effects of the proposals - the decision is made in the export plan - manage the changes.								
Typical delivery methods		Theoreti	cal In a	with the use of p	projector or	computer in					
i ypical denvery methods		Practice	-								
		Lab	Lab -								
		Students	as future manage how to describe how to analyse the most import how to present t bosses	ers know by t a firm from complex situ ant manager their results a	the end of cours managerial aspe ation and proble tools for analys and ideas so as t	ee: ect em es o convince	their future				
Requirements		Ability Students Students Attitude They are their opin circumst developr	Ability Students will be able: • to plan their work, • to take the necessary steps, • to evaluate their results, • to finish their tasks by deadline, • to identify and solve the problems of organizations • to apply the learning materials in practice • to communicate effectively with their supervisors • to work individually • to report their work both verbally and orally with presentations as well Attitude They are open and willing to discuss all points of the cases, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They have sensibility to find potentials for development.								

	Autonomy and responsibility						
	Students feel responsibility for both their development and environment. They cooperate with each other. They have sensibility to find possible resolving opportunities for problems.						
Brief description of the subject content	Preparation for practical work. Bibliography research. Methods of data and information collection (document analysis interview, questionnaires) and their presentation and interpretation. Introduction of work organisation and the organisation having the problem with managerial approach. Presentation of the effect of the selected alternative, implementation as change. Formal requirements, supervisor's report.						
Activity forms of students	Individual or group work: 60% Others: 40%						
Compulsory reading and its availability	 Earl R. Babbie (2013) The Practice Of Social Research. 13th Edition, Cengage, DUE Library Evans, David, Gruba, Paul, Zobel, Justin (2014) How to Write a Better Thesis. Springer, DUE Library Materials on MOODLE 						
Recommended reading and its availability	 Don E. Ethridge (2004) Research Methodology in Applied Economics 2nd Edition, Wiley, DUE Library 						

Internship MMENBSC

Subject name In Hungarian				Szakmai gyakorlat MM	Szintje	A						
Subject name	In English		Internship MMENBSC	Level	Α							
Subject code			DUEN-TVV-093									
Responsible educatio	nalii	nit		Institute for Social Sciences								
responsible educatio	mai u			Departme	nt	of Managem	ent and Enterp	rise Science	s			
Name of Mandatory Preliminary Study				TVV-090 Thesis writin	1.	Thesis resear	rch TVV		-			
		Number	of I	Lessons	-		Requirements	Credits	Language of			
		Theoretica	1	Practice		Lab	1	(ECTS)	Education			
Full-time 0)	0		0 0)	0	S (signature)	0	English			
Correspondence 0)	0		0 0)	0						
Teacher responsible f	for the	e course		Name		Dr. Anita Va	rga	Position	College Professor			
Educational goals				Introduction of general rules of research work and relevant regulations of the University. By the end of the course the student will be able to: - make a work plan, evaluating the discrepancies, and take the necessary measures, timely performance of tasks, - work in organizations to identify problems and resolve, - do the proper application of lessons learned, professionals to communicate effectively, - to edit a questionnaire, a survey conducted, and evaluated the questionnaires; - to determine the proper sample, group to organize a group and apply the methods of identifying problems, exploring the causes, ideas, suggestions for the collection; - get to know the message of professional, managerial style, drawn, the practice / preparation process of the thesis statement made; - do processes and activities to represent - awareness, compliance and								
				Theoretical	vith the use of p	projector or	computer in					
Typical delivery me	thods	5		Practice -								
				Lab -								
Requirements				Knowledge Students as future mana how to descril how to analys the most impo how to presen bosses Ability Students will be able: to plan their w to take the nead to evaluate the to finish their to identify and to apply the le to communicat to work indivi	vor eir ta d s ear ta te idu	ers know by the a firm from a complex situation and their results at their results at their results, and the probability of the probability and the the probability and the the probability of the probabil	he end of cours managerial aspe ation and proble tools for analys nd ideas so as t deas so as t ne, ene, olems of organizes in practice with their super-	e: ect em es o convince zations visors	their future			
			• to report their thesis writing process in professional way and style about the detected mistakes and problems so as to suggest developing opportunities									

	Attitude
	They are open and willing to discuss all points of the cases, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They have sensibility to find potentials for development.
	Autonomy and responsibility
	Students feel responsibility for both their development and environment. They cooperate with each other. They have sensibility to find possible resolving opportunities for problems.
Brief description of the subject content	The student fulfils his/her internship according to his/her study program and specialisation. The internship place has to guarantee the necessary human and technological conditions, which fits the position of student's specialisation.
Activity forms of students	Individual work
Compulsory reading and its availability	-
Recommended reading and its availability	-

Human Resource Management

Subiect nar	ne	In Hur	garian	Emberi erőforrás m	eneo	Level	А							
~j		In F	nglish	Human Resource N	Iana		DUEN-TVV-111							
Subject code														
j				Institute for Social	Scie	ences								
Responsible educational uni				Department of Eco	nom	ics								
Name of M	andat	orv		1	-									
Preliminary	/ Stud	v		-										
Number of	Lesso	ons p	er seme	ster	cter Cradita									
		The	oretical	Practice		Lab		Requirements	(ECTS)	Education				
	150/				1.		1.							
Full-time	ull-time 39		1		2		0							
Correspond	1150/		_					М	5	English				
ence	15		5		10		0							
Teacher res	ponsi	ble f	or the	N					D					
course				Name		Dr. habil M	onika	a Rajcsányi-Molnár	Position	College Teacher				
				The goal of the cou	rse i	s to develop	the e	ssential skills requir	ed of employe	es at the workplace				
				and to expand stude	ents'	HR manage	ement	skills.	1 9					
				The course broader	ns the	e students' k	nowl	edge and gives abilit	ties to manage	the labor market				
Educationa	l goals	s		institutions and pol	icies	, workplace	and l	abor market characte	eristics, the sy	stem of labor				
				relations, competen	ice a	nd motivatio	on ma	nagement, personne	l management	activities,				
				organizational beha	vior	, organizatio	onal c	ommunication, hum	an resource m	anagement case				
				studies, occupational safety and health project management.										
				Theoretical In a classroom with the use of projector or computer in each lecture.										
Typical del	ivery	metł	nods	Practice In a classroom with the use of projector or computer in each seminar.										
				Lab										
				Knowledge										
				The students know the basic facts, relationships, boundaries, limitations in human resource										
				management (HRM) system of knowledge and activity.										
				They know and understand the processes and procedures for the modalities of human activities.										
				They familiar with the business of manufacturing and service processes, human and social										
				relationships, their impact on human resources.										
				knows that a key element in the prosperity of the people working successfully										
				Ability										
				The students can apply the analyzing methods and tasks (planning, organizing, and thinking in										
				alternatives, inspection) on theoretical and practical grounds.										
				They are able to achieve the tasks assigned to them without control and inspection. They can										
л ·				plan, schedule and	com	plete the tas	ks wi	thin their scope of re	sponsibility.	C 11				
Requireme	nts			They can make the	sugg	gestions and	decis	ions and take measu	res required fo	or successfully				
				solving a task withi	n th	eir own scop		competence.						
				I ney are capable of	r unc	ierstanding t	ne ca	use-result relationsn	ip and using a	nalyzing skills in the				
				They can a apply the		ig-organizin	g-dec	cision preparing-deci	sion-making	ma annial				
				They can c apply the roles connected to employment and use and utilize managerial										
				competences.										
			Attitudo	mui	ate an opinio	511 01	then own, deriver at							
				Good negotiators a	re na	tient well a	duce	ed and have empoth	vie they car	identify with the				
				representatives of t	he of	ther side and	acce	nt their opinion	y, i.e. they cal					
				Good future-orient	ed h	argainers re	acce	their counternart are	e trustworthy	and not aggressive				
				It takes into account	it the	employmer	t pra	ctices of legal, ethics	al and professi	onal rules.				
				Susceptible to acco	mme	odate new in	form	ation, new tasks that	require collab	poration.				
								, ne tuono anti	quite contac					

	Considers it important for individual career planning
	It strives to lifelong learning and help the staff as well
	Autonomy and responsibility
	In professional questions negotiators can play the role of a decision-maker and are able to solve
	problems alone. They can tackle problems as responsible persons, i.e. can decide if it is a need
	problems about the problems as responsible persons, i.e. can accide in it is a need
	Ability to select its own staff, taking into account the specified criteria
	Ability to independently supply the greas it controls human processes
	Sansa of responsibility for subordinates working fallow
	Evolution of the human recourse management. Environmentally determination of LIDM The
	LIDM place in the organizational structure. The LIDM's activities and tasks. Ich planning
	rikivi piace in the organizational structure. The rikivi's activities and tasks, job planning,
Brief description of the	analysis, competency models. Career management, career planning alignment of individual and
subject content	organizational career opportunities. The workforce training and development opportunities.
2	Performance evaluation and feedback management. Compensation and incentive systems.
	Industrial relations system. Management of organizational changes. New trends in HRM
	practice.
Activity forms of students	Pair work presentation
	Group work (case study analysis)
	David Campbell & Tom Craig (2011): Organisation and the Business Environment, Second
Compulsory reading and its	edition, Routledge Publishing, USA
availability	Materials on Moodle
	Handouts from the lecturer
	TORRINGTON, Derek – HALL, Laura – TAYLOR, Stephen (2005): Human Resource
	Management. Pearson Education Limited, Essex, England.810 p. ISBN 978-0-273-68713-9
Recommended reading and	ARMSTRONG, Michael (2009): A handbook of Human Resource Management Practice, 11th
its availability	ed. London: Kogan Page 1062 p. ISBN 0-7494-4631-5
	http://www.academia.edu/1418840/ARMSTRONGS_HANDBOOK_OF_HUMAN_RESOUR
	CE_MANAGEMENT_PRACTICE)
Hand-in Assignments/	
measurement reports	Students have to take a final lest
Description of final test	Multi-choice questions

in Hungarian				Gazdaságos	energiaf	Level	Spec							
Name of th	e subject	in English	l	Basics of er	nergy sav	ing and cons	n	Code	DUEN-MGT-153 DUEL-MGT-153					
Responsibl	e educatio	onal unit		Technical Institute, Department of Energy and Mechanical Engineering										
Name of co	ompulsory	prior learn	ning											
Туре		Presentati	on	Practice		Laboratory F		Requirement	Credit	Language of education				
Full time	150/39	per week	2	per week	1	per week	0	E(Exam)	5	english				
Tan time	130/13	for the sub-	IU	Nama	3	per term		altan	a a ha du la	associata professor				
Teacher res	sponsible	for the subj	lect	Name	1	Dr. Eva Ko	vacs-B	okor	schedule	associate professor				
Training objective and justification of the course (content, output, location in the curriculum)				To introduc the operati- equipment.	To introduce students to the field of energy management and to familiarise them with the operation, use and development of the necessary high-efficiency and safe equipment									
				Presentation	For all Use of	students in a projector.	a large l	ecture hall with	a blackbo	ard presentation.				
Typical de	livery met	hods		Practice	Superv studies	ised and ind in the form	lepender of smal	nt solution of nu ll-scale exercises	merical ex	xamples and case				
				Laboratory										
				Other										
				Knowledge	•									
				Have a com	prehensiv	e knowledg	e of the	basic facts, dire	ctions and	limits of the subject				
				area of engi	neering.									
				Knowledge	of the ge	neral and sp	ecific ru	iles, contexts an	d procedu	res necessary for the				
				operation of	f the field	of engineer	ing.							
				Knowledge	of the ter	minology, l	key cond	cepts and theorie	es related	to the field.				
				Comprehen	sive knov	vledge of th	e main	theories in the f	ield of kn	owledge acquisition				
				and problem solving										
				methods of problem solving.										
				Basic knowledge of machine design principles and methods, control procedures and										
				operational processes.										
				Has an applied knowledge of measurement procedures, their tools, instruments and										
				measuring e	equipmen	t used in me	chanica	l engineering.						
				Understand	, characte	rise and mo	odel the	structure and or	peration of	f the structural units				
				and elemen	ts of med	chanical sys	stems, th	he design and ii	nterrelatio	nship of the system				
				components	s used.									
				Ability										
Requireme	nts (expre	ssed in terr	ns of	The ability	to analys	e at a basic	level the	e disciplines that	t make up	the knowledge base				
learning ou	itcomes)			of the techn	ical field	, to synthesi	se relati	onships and to r	nake appr	opriate evaluations.				
				Ability to a	apply the	most impo	ortant te	erminologies, th	eories and	1 procedures of the				
				technical di	scipline i	n the perform	mance c	of related tasks.						
				Ability to p	lan, orgai	ting to show	duct int	lependent learni	ng. utha mina	vinlag and tashniquas				
				Ability to to	entity for	time technic	ai probi	iems and to appr	y the princ	siples and techniques				
				to identify	formulate	and implar	nont (st	andard operation	in pract	ica)				
				(using stand	lard proce	dures)	nent (su	anuaru operatior	is in pract	ice)				
				Attitude	and proce	aures).								
				It assumes	and aut	hentically r	enresen	ts the social ro	le of its	profession and its				
				fundamenta	l relation	shin with th	e world	ts the social fo	<i>ne</i> or <i>ns</i>	profession and its				
				Open to lea	rning abo	out, acceptir	ig and a	authentically cor	nmunicati	ing professional and				
			technologic	al develo	pments and	innovat	ions in the field	of engine	ering.					
				Seeks to sol	ve proble	ms, prefera	bly in c	ooperation with	others.	6				
				Have the sta	amina and	l tolerance of	of mono	tony to carry ou	t practical	activities				
				has the abili	ity to				-					
				Applies his	/her acqu	ired techni	cal kno	wledge to gain	a thoroug	gh understanding of				
				observable	phenome	na, to descri	be and	explain their law	/8.					
				In his/her	work, he	/she observ	ves and	complies with	the rele	vant safety, health,				

Basics of energy saving and conservation
	environmental, quality assurance and control requirements.
	Autonomy and responsibility
	In unexpected decision situations, he/she independently thinks through and develops
	comprehensive, substantiating professional questions on the basis of given sources.
	In the performance of his/her professional duties, he/she will also cooperate with
	qualified professionals from other disciplines (primarily technical, economic and
	legal).
	He/she will share his/her experience with his/her colleagues in order to support their
	development.
	Assumes responsibility for the consequences of his/her technical analyses, the resulting
	proposals and the decisions taken.
	Introduction to energy management. Areas of energy and energy management.
	Overview of the world energy economy, main trends and macro-relationships.
	Overview of national energy management in Hungary. National energy structure and
	energy balance. Main energy needs of each economic sector. Energy demand and
	energy use of the population.
	Energy carriers and sources I:
	Energy carriers and energy sources of our planet. Exhaustible, renewable and
	renewable resources. Physical and chemical properties of different energy carriers.
	Extraction, transport and storage of energy carriers. Fossil fuels. Coal, oil, natural gas.
	Energy carriers and resources II:
	Exhaustible energy sources: nuclear energy.
	Renewable energy sources: solar, wind, hydro and geothermal, biomass, biogas. Waste-
	to-energy options. Conversion processes of energy carriers: combustion, combustion
	products.
	Energy conversion 1. Thermal energy: stove, convector, hot water boiler, steam boiler.
	Electricity: thermal power plants, gas engines, gas and steam turbines, steam cycles,
	condensing power plants, combined cycle power plants.
Short description of the subject	Treatment, storage, disposal and use of pollutants. Remediation, maintenance. Energy
content	transport. Storage facilities. Water, gas, hot water, steam and electricity networks.
	Energy use I. Meeting heat demand, heating and hot water supply.
	Energy use in industrial processes. Electricity and heat consumption. Energy
	requirements of agriculture, transport and services. Ways of meeting demand. Legal
	environment, strategic approach. Legal environment of energy supply, laws and
	regulations. Corporate energy management. Tasks of the energy manager.
	Strategic approach. Energy management. Systematic description of energy use.
	Understanding of system and system boundary. Mass and energy balances.
	Effectiveness and efficiency.
	Energy use II. Nature of use, performance and duration diagram. Estimation of
	expected consumption. Optimal control, monitoring of consumption, equipment
	operating in parallel. Energy storage options, storage. Energy use in residential,
	government, industry and agriculture. The energy mix.
	Energy use III Transport of energy carriers. Transport planning. Optimal means and
	routes of transport. Recovery of losses. Safety considerations. Environmental
	constraints, emissions of pollutants during energy use
	Energy use IV . Description of energy conversion and consumption processes. Balance
	equations: mass, energy and waste balance. Identification of losses.
Types of student activities	Presentation: Processing of lectures with notes 40%, independent processing of
Types of student activities	theoretical material 20%, preparation of a seminar presentation 40%
	• Endre Kiss: The Basics of Economical Energy Use, Electronic handbook,
Required interature and contact details	2023, Moodle system
Recommended literature and contact	 Y. Mizuta: Energy Saving Technology kézikönyy. JICA-DEED kiadásában.
details	2003
Description of tasks to be	Full-time: student seminar presentations
submitted/measurement reports	Part-time: student seminar presentations
±	During the semester, for correspondence students in the 2nd and 4th consultation, and
	for day students in the 6th and 13th week, five theoretical questions from the lectures.
Description and timetable of the	The papers are 100-100 marks, with a maximum of 20 marks for each question. The
workshops	marks for the essay will be calculated according to the mark limits given in the
	Regulations.

	in Hungar	ian	ESG szemlé	élet a válla	Level	Spec						
Name of the subject	in English	l	ESG approa	ich for bu	Code	TGT-110						
Responsible educational unit			Institute for Social Sciences Department of Economics									
Name of compulsor	y prior learr	ning										
Туре	Presentati	on	Practice		Laboratory		Requirement	Credit	Language of education			
Full time	per week	2	per week	1	per week	0	M(Midterm	5	english			
Fait time Teacher responsible	for the sub	iect	Name	5	Dr Andrea	U Keszi-9	Szeremlei	schedule	college professor			
Training objective and justification of the course (content, output, location in the curriculum)			Goals, deve After maste apply the environmen	elopment ring the i knowled tal sustain	objectives ndividual E ge and ap nability at he students in a	SG strat ply the ome and	tegic goals, the e principles ne d at work.	student is ecessary	able to consciously for economic and			
			Presentatior	Use of	projector.	t luige i		u oluenooi	ard presentation.			
Typical delivery me	thods		Practice	Supervi studies	ised and ind ind in the form	epender of smal	nt solution of nu l-scale exercises	merical ex	amples and case			
			Laboratory									
Requirements (expressed in terms of learning outcomes)			 Knowledge Knows the Can interp Ability Able to ind He/She is Able to ap strategy Attitude Open to er Interested Lives cons Autonomy In the courd qualified pro- Take respondent 	dependen able to co ply the ac nvironmer in new m sciously u and resp rse of per ofessiona onsibility	and strategy ements below tly apply the onsciously in equired know ntal protecti- ethods and sing the know onsibility forming his/ ls from othe for your con	on and t cools relowledge wher pro: r fields. nsumer	G each group of I ions of ESG his environmen at home and at v the resulting eco lated to the field he has acquired fessional tasks, I decisions and en	ESGs It and prot vork based nomic kno i ne/she also icourage o	ect it I on the ESG owledge o cooperates with thers to be aware			
Short description of content Types of student act	nge trend istainable ince of en limate ch SG strateg and poss on of the rocessing al materia Processing ratory me	s, main data developmenta ange summi gy ible steps of <u>ESG strateg</u> of the hear 1 30%, inde g of the hear asurement 2	i, expect it l protect f individ <u>y in bus</u> l text w pendent d text w 0%, act	ted effects tion lual points of the siness operations ith note-taking (research work f rith note-taking tive participatior	e ESG stra 50%, indep 10%. 10%, indep 1 in the lab	tegy pendent processing pendent preparation poratory						
Required literature a	and contact	details	measuremen Binometrical binometrics binometric	nt 70%. rendan Bi pokshelf.c	radley: ESG le/download	Investi 1/0016/1	ng, https://down 914/26/L-G-00	load.e- 1619 <u>142</u> 6-	-0052605701.pdf			

ESG approach for businesses

Recommended literature and contact	 ESG Scores V2.6.3ESG book – 2022 <u>https://www.esgbook.com/docs/marketing/userguides/USERGUIDE_ESGB</u> ook SCO_ESG_262.pdf
details	 wbcsd: ESG Disclosure Hangbook, 2019https://docs.wbcsd.org/2019/04/ESG_Disclosure_Handbook.pdf

Analysis of Business Cases

Subject name In Hun		In Hungarian		Üzleti esettanulmányo	Szintje	А							
Subject name	In English		Analysis of Business C	Level	А								
Subject code				DUEN-TVV-119									
Responsible educational unit			Institute for Social Sciences Department of Management and Enterprise Sciences										
Name of Mandatory	Prelin	ninary Study		-									
Number of Lessons							Dequinamenta	Credits	Language of				
		Theoretical		Practice		Lab	Requirements	(ECTS)	Education				
Full-time	150/39		1		2	0	М	E	En aliah				
Correspondence	150/15		5		10	0	1V1	5	English				
Teacher responsible	e for the	course		Name		Dr. Erzsébet	Szász	Position	Collgege Professor				
Educational goals			By the end of the course the students have more knowledge in social sciences. They will collect methodological skills and will have the necessary professional and general education. With their economic, business, management and sociological skills they will be able to analyse different markets and maintain a company's competitive advantage.										
				Theoretical	In eac	a classroom v ch lecture.	with the use of p	projector or	computer in				
Typical delivery me	ethods			Practice Flipchart, blackboard and other multimedia equipm smaller seminar rooms suitable for group work									
				Lab	-								
Requirements			Students will have the necessary knowledge both in professional and general fields, know how to combine their economic, business, management and sociological skills, know the domestic business models and some special types of innovation. Ability Students will be able to investigate business problems with a board view, to identify the synergy structure of business activity, to apply both theoretical and practical analysing systems and tasks (planning, managing, using alternatives, control), to use in practice the process of planning – managing –preparation of decision – decision-making – control and handle its cause-effect relation in competitive situation.										
				They are open and willing to discuss all points of the cases, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They have sensibility to find potentials for development. Autonomy and responsibility Students feel responsibility for both their development and environment. They cooperate with each other. They have sensibility to find possible resolving opportunities for problems									
Brief description of	the sub	ject content		The value chain and cr technical and economi logistic buyer satisfact chain: system (network Potential suppliers and supplier evaluation in importance of demand	reat c co ion k) c l tho inte an	ion of double onnections of . The custom of business re- e internet. Ev prnet. Strategi ticipation in p	value both for value chain. The r value and the lationships. The aluation of support c procurement. production logis	buyers and he customer e internet. The role of sup pliers, the cr The methor stics. Resour	suppliers. The value and he supply pliers. iteria of ds and rce planning				

	systems with buyer's cooperation. Management of customer relationship
	(CRM). The criteria of CRM systems (soft wares). The importance of services
	and its logistic problems. International transport. Competitiveness and supply
	chain management. Integration of supply chain. Measurement of supply chains.
	Tendencies in supply chain management.
A stivity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Essay
Activity forms of students	writing
	Foley, James F. (2013) The global entrepreneur: taking your business
	international. 3 rd ed. Jamric Press Internat, DUE Library
	Thierry Burger-Helmchen (ed) (2012) Entrepreneurship - Creativity and
Compulsory reading and its availability	Innovative Business Models. InTech. ISBN 978-953-51-0069-0
	Materials on MOODLE
	W. Chan Kim – Renee A. Mauborgne (2015) Blue Ocean Strategy, Expanded
	Edition: How to Create Uncontested Market Space and Make the Competition
	Irrelevant. Harvard Business Review Press
D	Marc A. Annacchino, P.E. (2003) New Product Development
Recommended reading and its availability	From Initial Idea to Product Management. Elsevier Inc. ISBN: 978-0-7506-
	7732-5
	Peter Thiel - Blake (2014) Master Zero to One: Notes on Startups, or How to
	Build the Future. Crown Business, DUE Library
	Processing and analysis of 2 case studies with suggestions as well. The teams
manu-in Assignments/ measurement reports	choose the cases. (On week 8 th and 10 th)
Description of midterm tests	Midterm test on week 12 th . Supplementary test on week 13 th .

2024

Basics of Logistics

Subject name	In Hungarian	Logisztika alapjai				Szintje	А				
	In English	Basics of Logistics	3			Level	А				
Subject code		DUEN-TVV-212									
Responsible edu	cational unit		Institute for Social Sciences								
		Depa	artment	of Managem	ent and Enterp	rise Science	es				
Name of Mandatory Pre	liminary Study	r			1	G 1'	T				
	Number of	Lessons Braatiaa		Lab	Requirements	(FCTS)	Language of				
Full_time 150/	/30 1	Thethee	2			(LC15)	Education				
Correspondence 150/	/15 5		10	М	5	English					
Teacher responsible for	the course	Name	10	Dr. Lajos Ve	pres	Position	College Professor				
Educational goals	The goal of the cou and processes of lo warehousing. The knowledge on the distribution, and to information technol	The goal of the course is to provide a broad overview on the basic mechanisms and processes of logistics and supply chain management, material flow and warehousing. The course enables students to gain both practical and theoretical knowledge on the logistics processes of procurement, production and distribution, and to become familiar with the mechanisms of material handling, information technology and transportation management.									
Trusical daliyany matha	Theoretical	Fli auc	pchart, black litorium	board and other	r multimedia equipment in						
i ypical delivery metho	us	Practice	sm	smaller seminar rooms suitable for group work.							
		Lab									
		 understa: know the logistics know the know the 	nd the l e necess activiti e main e main	basic concept sary operation les laws and regu strategies and	s of logistics n mechanisms t llations applied l techniques app	o successfu in contemp plied in log	Illy manage porary logistics istics				
		Ability Students will be ab	ole to:								
Requirements	 Use and apply the basic terms and vocabulary of the profession with confidence Synthetize and organize their knowledge and apply it in the appropriate situations Identify the main resources and activities in logistics Apply the strategic planning tools used in contemporary logistics Use and apply the literature of the profession with confidence 										
		Students should be Open to discussed Sensitive Susceptil Autonomy and re Responsible for his	e: classro d situat e and cr ble to d sponsi s/her ov	om case stud: ions. itical toward: levelopment o bility wn developm	ies, and to the a s theoretical and opportunities fo ent.	ctive interp d practical or exploitati	pretation of innovation on.				

	Cooperate with the instructor and fellow students, seeks to solve the discussed problems. Feel responsible for the development of his/her working environment
Brief description of the subject content	Basic logistics concepts and phenomena. Lgistics systems and modules. The flow of materials and information. Procurement and distribution. Warehousing, storing and inventory management. Production management, Transportatio systems. Supply chain management and the bullwhip effect. Simulations and planning in logistics
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Group work, role play
Compulsory reading and its availability	 Jacobs, R.F. – Chase, R.B.: Operations and supply chain management, McGraw Hill, 2011, DUE Library, ISBN-10: 0071220909 ISBN-13: 978-0071220903 Gourdin, K: Global Logistics management: A competitive advantage for the 21st century, 2nd edition, Wiley-Blackwell, 2006, DUE Library, ISBN-13: 978-1405127134, ISBN-10: 1405127139 Materials on MOODLE
Recommended reading and its availability	 Mangan, J. – Lalwani, C. – Butcher, T.: Global logistics and supply chain management, Wiley, 2008, DUE Library, ISBN-13: 978- 0470066348, ISBN-10: 0470066342

Novel techniques of enviromental protection

in Hungarian			Új környeze	etvéde	lmi	Level	Spec						
Name of th	e subject	in English		Novel techniques of enviromental protection							DUEN-MGT-226 DUEL-MGT-226		
Responsible educational unit			Technical Institute, Department of Energy and Mechanical Engineering										
Name of co	mpulsory	prior learn	ing							-	-		
Туре		Theoretica	ıl	Practice			Lab		Requirement	Credit	Language of education		
Full time Part time	150/39 150/15	per week per term	2 10	per week per term	0		per week per term	1 5	М	5	english		
Teacher res	ponsible f	for the subj	ect	Name			Dr. Éva Ko	vács-Bo	okor	schedule	associate professor		
Training of	iective an	d justificat	ion of	Goals, deve	elopm	ent	obiectives				FF		
the course (content. c	utput, loca	tion in	Introduce s	tuden	ts to	o the lates	t envir	onmental techn	iques an	d their application.		
the curricul	um)	aipui, iota		recycling of	used	lithi	um batterie	s.	ominemur teem	iques un	a then appheaton,		
)			i ce j ening e	For	alls	students in a	large l	ecture hall with	a blackbo	pard presentation.		
				Theoretical	Use	of p	projector.	i itu go i		u onuence			
Typical del	ivery met	hods		Practice									
				Lab	Mea	asure	ements in la	borator	ries				
				Other									
				Knowledge	9								
				Knowledge	of the	e gen	neral and sp	ecific ru	iles, contexts an	d procedu	res for the operation		
				of the techn	ical fi	eld.							
				Familiarity	with t	he te	erminology	the ma	in contexts and	theories r	elated to the field.		
				Comprehen	sive k	now	ledge of th	e main	theories of the	field in	terms of knowledge		
				acquisition	and pi	roble	em solving						
				methods of problem solving.									
				Basic knowledge of machine design principles and methods, control procedures and									
				operational processes.									
				Has an applied knowledge of measurement procedures, their tools, instruments and									
				measuring equipment used in mechanical engineering.									
				Understand, characterise and model the structure and operation of the structural units and alements of machanical systems the design and intervalationship of the systems									
				and elements of mechanical systems, the design and interrelationship of the system									
				Ability	s useu.	•							
				Ability to	annly	the	most imp	ortant t	erminology the	ories and	I procedures of the		
				technical fie	appiy ald in 1	the r	niost imp	e of rela	ted tasks	Joines une	i procedures of the		
				Ability to p	lan. or	rgan	ise and con	duct ind	lependent learni	ng.			
. .	,			Ability to identify routine technical problems and to apply the necessary principles and									
Requiremen	nts (expre	ssed in terr	ns of	techniques to solve them									
learning ou	tcomes)			to identify, formulate and implement (standard operations in practice)									
				(using standard procedures).									
				Attitude									
				It is open to learning about, embracing and authentically communicating professional,									
				technologic	al dev	elop	ment and in	novatio	on in engineerin	g.			
				Seeks to sol	ve pro	oblei	ms, preferal	oly in co	ooperation with	others.			
				Have the sta	amina	and	tolerance of	f mono	tony to carry ou	t practical	activities		
				has the ability to									
				Applies his	/her a	icqui	ired technic	al kno	wledge to gain	a thoroug	sh understanding of		
		observable phenomena, to describe and explain their laws.											
		In his/her work, he/she observes and complies with the relevant safety, health,											
		Autonom	and -	ant	y assurance	and CO.	nuor requirementer	113.					
						esp(man masterer.	n ol -l(ion ho/at'11	alao	anoto with1:c 1		
				nrofessional	out fi le in o	18/116 thor	fields (prin	nar uut harily te	chnical econom	aiso coop	renate with quanned		
				He/she sha	res hio	s/hei	r experience	with	his/her colleagu	es thus a	500.		
				developmen	nt.	J IICI	experience	~ **1t11	morner concagu	co, muo (sinciouning to uten		
				He/she is re	spons	ible	for the con	sequenc	es of his/her tec	hnical and	alyses, the proposals		
			he/she make	es and	the	decisions h	e/she ta	ikes.		,, r-r-r-said			

Short description of the subject content	The expected construction of new types of equipment in line with Chinese emission reduction plans (aimed at developing emission reduction processes and equipment that meet a tenth of the EU limit). Possibilities to improve the efficiency of conventional electrostatic precipitators in coal and other fossil-fired power plants. Electrostatic precipitators with increased efficiency, Bag filters with improved electrostatic charge. Electrostatic cyclones. Venturi high efficiency filters. Design principles for separators using a combination of the above options. Design guidelines. New trends in water treatment. Newer principles and options for biological water purification. Theory and practice of endocrine disruptor removal from water. New noise reduction techniques (interference, new types of attenuation. New methods of odour control, modern methods of odour measurement. Dioxin and PCB abatement. New radioactivity reduction techniques. Processing of red mud, extraction of rare earths and scandium.
Types of student activities	Presentation: Processing of lectures with notes 40%, independent processing of theoretical material 20%, preparation of lab notes 40%
Required literature and contact details	Endre Kiss: New environmental techniques, Electronic note, 2023, Moodle system
Recommended literature and contact details	Y. Mizuta: Energy New Environmental Technologies Technology Handbook, JICA-DEED publication, 2003 Proceeding Publication of the Wroclaw International World Conference on Electrostatic Discharge Elimination
Description of tasks to be	Full-time: preparation of 5 measurement reports
submitted/measurement reports	Part-time: 3 measurement reports
Description and timetable of the workshops	During the semester, for correspondence students in the 2nd and 4th consultation, and for day students in the 6th and 13th week, five theoretical questions from the lectures. The papers are 100-100 marks, with a maximum of 20 marks for each question.

Enterprise Information Systems

Subject name		In Hungarian	l	Vállalati	információs 1	reno	dszerek		Szintje	А			
Subject name		In English		Enterpris	e Informatior	ı Sy	ystems		Level	А			
Subject code				DUEN-TVV-120									
Responsible educat	ional ur	nit					Institute for	Social Sciences	5				
Responsible educat	ionai ui	IIt			Departm	nent	t of Managem	ent and Enterp	rise Science	S			
Name of Mandatory Preliminary Study													
	,			DUEN-IS	SF-010 Inforr	nat	ICS			<u> </u>			
	of I	Lessons	D		I	Requirements	Credits	Language of					
	150/20	Theoretics			Practice	h	Lab	-	(ECIS)	Education			
Full-time	150/39		0			2	0	М	5	English			
Correspondence	150/15		0	Name Anite Miháloviesná Kellán Desition									
reacher responsible	e for the	e course		Name	t of this cour		Anila Minale	the students to	POSITION	ico information			
				The targe	n basic busin	se i	process appr	conch. The cour	se contains	the types role			
				and tasks	of enterpris	e ii	formation sy	stems and basi	se contains	the types, role,			
				impleme	nting, operati	ng	and extending	these systems.	ie knowiedz	,e or selecting,			
				The cour	se enforces th	e st	tudents in the	knowledge of s	vstem appro	oach, highlights			
Educational goals				the impor	rtance of info	rma	ation manager	ment in the bus	iness proces	ses.			
				Performi	ng the cours	se,	students will	l be able to i	navigate in	the operative			
				informati	ion flow and	info	ormation man	agement of ente	erprises and	work in teams			
				for imple	ementation, d	eve	elopment and	connection to	other intern	al and external			
				enterprise	e information	sys	stems.						
				Theoretic	cal	In	a classroom v	with the use of p	projector or	computer in			
						each lecture.							
Typical delivery m	ethods					In	a classroom p	project work, sn	nall team an	d cooperative			
				Practice		wo	ork with the u	se of projector	or computer	in each			
				Lab		sei	minar.						
				Lau	lao								
				KIIUWICU	overviews th	na f	unctionalities	architectura	lata and pro	cass model of			
				 overviews the functionanties, architecture, data and process model of standard ERP systems, 									
				 has a strategic and system-oriented thinking. 									
				 knows the principles, policies and processes in extended enterprise 									
				information systems and related business and logistic processes.									
				Ability:									
				• applies the theoretical knowledge systematically in practice,									
				• manages the system components individually and in system,									
				 can work and support team in implementation projects of enterprise information system. 									
				Information systems,									
					systems,	510	lever busilies	s processes by (interprise n	ioimation			
Requirements				•	overviews th	ne d	locumentatior	n of enterprise i	nformation	systems and			
					the related se	oftv	ware,						
			• understands the professional literature,										
			•	applies the d	lefi	nitions of the	specialization p	professional	ly.				
				Attitude									
				•	opened for t	ne i	innovations of	t the specializat	10n,				
					able to solve		oblems alone	ovement,					
					can tackle p	rob	lems as respo	, nsible persons					
				•	self-training	ab	ility.	151010 persons,					
				•	opened for c	:001	peration with	professionals o	n other rela	ted fields.			
				Autonon	ny and respo	nsi	bility	-					
				• responsible for self-training,									

• search the solutions for problems, • responsible for the development of work environment, • takes responsible part in forming professional opinions and its explanations.Brief description of the subject contentThe role, place, history, types, integration and general requirements of enterprise information systems in the enterprise. Introduction to a certain enterprise information system and the basic use of it. General system architectures, technologies, functions, data structures and data manipulation.Brief description of the subject contentERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
• responsible for the development of work environment,• responsible for the development of work environment,• takes responsible part in forming professional opinions and its explanations.The role, place, history, types, integration and general requirements of enterprise information systems in the enterprise. Introduction to a certain enterprise information systems and the basic use of it. General system architectures, technologies, functions, data structures and data manipulation. ERP systems, standard systems. SRM, CRM, SCM systems. Functional structure of ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
Brief description of the subject contentThe role, place, history, types, integration and general requirements of enterprise information systems in the enterprise. Introduction to a certain enterprise information system and the basic use of it. General system architectures, technologies, functions, data structures and data manipulation. ERP systems, standard systems. SRM, CRM, SCM systems. Functional structure of ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
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Brief description of the subject contentBrief description of the subject contentBrief description of the subject contentBrief description of the subject contentActivity forms of students
Brief description of the subject contentBrief description of the subject contentBrief description of the subject contentActivity forms of students
Brief description of the subject contentERP systems, standard systems. SRM, CRM, SCM systems. Functional structure of ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
Brief description of the subject contentERP systems, standard systems. SRM, CRM, SCM systems. Functional structure of ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring with tutor 30% Individual knowledge acquiring 25%
Brief description of the subject contentERP systems, standard systems. SRM, CRM, SCM systems. Functional structure of ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
Brief description of the subject contentof ERP systems. Organizational structure, Master data, Transactional data and Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.Activity forms of studentsTheoretical knowledge acquiring 25%
Activity forms of students Document flow concept. Type, hierarchy, state and life cycle of the documents. The sales and distribution, procurement, production planning and execution, financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques. Activity forms of students Theoretical knowledge acquiring 25%
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Activity forms of students financial and human capital management functional modules. Order-to-Cash case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques. Theoretical knowledge acquiring with tutor 30% Individual knowledge acquiring 25%
case, Procure-to-Pay, Plan-to-Produce. Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques. Activity forms of students Theoretical knowledge acquiring 25%
Activity forms of students Filedate to Fady, Filedate Controlling and operative decision support. Office automation systems. Management information systems. Selecting and customizing standard ERP systems. Business modelling techniques.
Activity forms of students
Practical tasks and complex work with tutors 15%
Individual practical tasks and complex work 30%
[1] Simha R. Magal (Author), Jeffrey Word (Author): Integrated Business
Processes with ERP Systems 1st Edition, ISBN-13: 978-0470478448,
Compulsory reading and its availability Wiley&Sons, 2012
[2] SAP University Alliances: Introduction to the ERP system by GBI, version
3.0. 2016
Recommended reading and its
availability

Logistic Management

Subject name	In Hungarian	Logisztik	ai menedzsm	Szintje	A						
Subject name	Logistic 1	Management		Level	Α						
Subject code		DUEN-TVV-214									
Responsible educational un	nit	Institute for Social Sciences									
			Departm	ent	of Managem	ent and Enterp	rise Science	S			
Name of Mandatory Prelim	unary Study	Business	logistics DUE	ÉN-	-TVV-121		a r	T C			
	Number of I	Lessons			T -h	Requirements	(ECTS)	Language of			
Full time 150/30	heoretical		Tactice	1			(ECIS)	Education			
Correspondence 150/39	10			5	0	М	5	English			
Teacher responsible for the	Name		5	Dr. Levente	Rádai	Position	College Pfrofessor				
Educational goals		I oday on is the main course is to approa- the base of this value it can be a ensure a fa and have the studen the criteric decrease The cours view beca	e of the strate nagement of a to develop a c ch and unders of logistic serve. This corresp realised only frame for this the competen nts to analyse a of supply cl the negatives se is the last c ause it focuses	egic cert star vice oon wit coo cess and hain of	important as bors in supply of tain attitude. A ad supply cha e is awareness dence is the k h cooperation operation, if t is to use this p d identify the ns and networ bullwhip effe rse of the Log n logistic acti	pects of organi- chain. That's with After the course ins as a whole. Is of the buyer's tey of business in with other firm the members of cossibility. The l connections in rks in different ct. cistic Specialisa vities among or	zational con hy the basic the studen They will u value and t success and ns. The sup supply chai learning ma supply chai sectors; to a tion, which rganisations	npetitiveness a im of this ts will be able inderstand that to apply for l in most cases ply chain can in realize this terial enable ins; to define avoid or gives a board			
		Theoretic	-al	In	a classroom v	vith the use of p	projector or	computer in			
Typical delivery methods		Theorette	di	eac	ch lecture.						
i ypical denvery methods		Practice		-							
		Lab		-							
		• • •	Students will understand a know the dif know the bas management get to know t different sect	l fere sic : , the tors	learn the basi ence between methods and most importa	c terms of logis supply chain a interrelationshi ant characteristi	stic manage nd value ch ps of logisti cs of supply	ment, ain, ic y chains in			
		Ability									
Requirements	 Students will be able to investigate business challenges from a logistic management aspect, to determine the features of network, to avoid or decrease the losses due to bullwhip effect, recognize and evaluate the synergy effects of tools of logistic management. Attitude										
	They are open and willing to discuss all points of the cases, as well as express their opinion, but without disclosing any important information about the circumstances of their own company. They have sensibility to find potentials for development.										

	Autonomy and responsibility				
	Students feel responsibility for both their development and environment. They cooperate with each other. They have sensibility to find possible resolving opportunities for problems.				
Brief description of the subject content	The value chain and creation of double value both for buyers and suppliers. The technical and economic connections of value chain. The customer value and logistic buyer satisfaction. The customer value and the internet. The supply chain: system (network) of business relationships. The role of suppliers. Potential suppliers and the internet. Evaluation of suppliers, the criteria of supplier evaluation in internet. Strategic procurement. The methods and importance of demand anticipation in production logistics. Resource planning systems with buyer's cooperation. Management of customer relationship (CRM). The criteria of CRM systems (soft wares). The importance of services and its logistic problems. International transport. Competitiveness and supply chain management. Integration of supply chain. Measurement of supply chains. Tendencies in supply chain management.				
Activity forms of students	Individual work				
Compulsory reading and its availability	 Mangan, John [et al.] (2012) Global logistics and supply chain management. 2nd ed Hoboken: John Wiley & Sons, DUE Library 				
Recommended reading and its availability	 Blanchard, David (2007) Supply chain management: best practices. Hoboken, N.J.: Wiley & Sons, DUE Library 				

2024

Business Logistics

In Hungarian	Vállalati	logisztika				Szintje	А		
In English		Logistics	Level	А					
	DUEN	-TVV-121							
Responsible educational unit			Institute for Social Sciences						
minom: Ctudy	Department of Management and Enterprise Sciences								
Number of	Dasies 0	Logistics D	UE	IN-1 V V-212		Credits	Language of		
Theoretical	Lessons	Practice		Lab	Requirements	(ECTS)	Education		
9 1			2	0					
5 5			10	0	M	5	English		
ne course	Name			Dr. Lajos Ve	res	Position	College Professor		
Educational goals		The goal of the course is to highlight the importance of business logistics within an organization, and to provide a broad overview of the main processes, methodologies and strategies applied in business logistics. By the end of the course, students will able to plan, operate and analyse information and material management processes, and they will be able to recognize and apply strategic and operational tools during planning and execution of logistics activities							
Typical delivery methods		Theoretical		pchart, black ditorium	board and other	[•] multimedia equipment in			
			Fli sm	Flipchart, blackboard and other multimedia equipment in smaller seminar rooms suitable for group work.					
	Lab Knowled By the end Ability Students Attitude Students	ige nd of the cour understand know the ne business log be familiar activities know the m will be able Use and app confidence Synthetize a appropriate Identify the Apply the s Use and app should be: Open to cla discussed si Sensitive an Susceptible ny and respe-	rse, the lecess gistic with aain to: ply t and c situat d cr to d onsi	students will basic concept sary operation cs activities in the internal strategies and he basic term organize their ations in resources i egic planning he literature of om case studi ions. ritical toward. levelopment of bility	s of business lo n mechanisms t and external fac l techniques app s and vocabular r knowledge and n business logis tools used in bu of the profession ies, and to the a s theoretical and opportunities fo	gistics o successfu ctors influer plied in busi ry of the pro d apply it in stics usiness logi n with confi ctive interp d practical i r exploitatio	lly manage acing logistics iness logistics ofession with a the stics idence retation of nnovation on.		
	In Hungarian In English ational unit minary Study Number of Theoretical 9 1 5 5 ne course	In Hungarian Vállalati In English Business ational unit DUEN minary Study Basics of Number of Lessons Theoretical 9 1 5 5 ne course Name Theoretical Practice an organ methodo course Theoretical 8 Theoretical 9 Theoretical 10 Theoretical 11 Theoretical 12 Theoretical 13 Theoretical 14 Theoretical 15 Theoretical 16 Theoretical 16 Theoretical 16 Theoretical 16 Theoretical 17 Theoretical 18 Theoretical 19	In Hungarian Vállalati logisztika In English Business Logistics DUEN-TVV-121 ational unit Departuminary Study Basics of Logistics D Number of Lessons Theoretical Practice 9 1 1 5 5 1 ne course Name Name Theoretical Practice 9 1 1 5 5 1 ne course Name Name Theoretical Practice 1 Lab 1 1 Knowledge By the end of the course, students will an activities 1 and operational tools 1 1 Practice Lab 1 1 Knowledge By the end of the course, students will be able 1 Is with the able 1 1 <	In Hungarian Vállalati logisztika In English Business Logistics ational unit Department minary Study Basics of Logistics DUE Number of Lessons In Ecourse Theoretical Practice 9 1 2 5 5 10 ne course Name Theoretical Practice Fli an organization, and to pr methodologies and strategr course Name Theoretical Practice Practice Fli aud practice Lab In English Knowledge By the end of the course, Inderstand the less business logistic In English By the end of the course, In English Students will be able to: In English Students will be able to: In English Students should be: In English Studeno	In Hungarian Vállalati logisztika In English Business Logistics DUEN-TVV-121 ational unit Institute for Department of Managem minary Study Basics of Logistics DUEN-TVV-212 Number of Lessons Institute for Theoretical Practice Lab 9 1 2 0 e course Name Dr. Lajos Ve The goal of the course is to highlight th an organization, and to provide a broad methodologies and strategies applied i course, students will able to plan, oper management processes, and they will b and operational tools during planning a Its Theoretical Flipchart, black auditorium Practice Flipchart, black smaller seminar Lab Vanodege By the end of the course, students will ounderstand the basic concept know the necessary operation business logistics activities b familiar with the internal activities b know the main strategies and the dasic concept know the main strategies and business logistics activities b familiar with the internal activities b know the main strategies and the dasic term confidence Synthetize and organize thein appropriate situations </td <td>In Hungarian Vállalati logisztika In English Business Logistics JUEN-TVV-121 ational unit Institute for Social Science: Department of Management and Enterpriminary Study Basics of Logistics DUEN-TVV-212 Number of Lessons Requirements 9 1 2 0 Number of Lessons Requirements 9 1 0 M 1 2 0 M 1 2 0 M 1 2 0 M 1 2 0 M 1 2 0 M 1 2 0 M 1 10 0 M 1 2 0 M 1 10 0 M 1 10 0 M 1 10 0 M 1 10 10 M 1 10 10 M 1 10 10 M 1 <td< td=""><td>In Hungarian Vállalati logisztika Szintje In English Business Logistics Level DUEN-TVV-121 Institute for Social Sciences Department of Management and Enterprise Science minary Study Basics of Logistics DUEN-TVV-212 Number of Lessons Theoretical Practice Lab Requirements Credits (ECTS) 5 10 0 M 5 te course Name Dr. Lajos Veres Position The goal of the course is to highlight the importance of business I an organization, and to provide a broad overview of the main promethodologies and strategies applied in business logistics. 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	Cooperate with the instructor and fellow students, seeks to solve the discussed problems. Feel responsible for the development of his/her working environment				
Brief description of the subject content	Concepts and strategic value of business logistics. Information flow within the company. Logistics and production planning. Warehousing, purchasing, inventory management. Inbound and outbound logistics. Information and ICT in logistics				
Activity forms of students	Case study analysis, Presentations, Individual work, Frontal class work, Group work, role play				
Compulsory reading and its availability	 Gourdin, K: Global Logistics management: A competitive advantage for the 21st century, 2nd edition, Wiley-Blackwell, 2006, DUE Library, ISBN-13: 978-1405127134, ISBN-10: 1405127139 Ghiani,G. – Laporte, G. – Musmano, R.: Introduction to logistics systems management, Wiley, 2013, DUE Library, ISBN-13: 978- 1119943389, ISBN-10: 1119943388 Materials on MOODLE 				
Recommended reading and its availability	 Blanchard, D.: Supply chain management best practices, Wiley, 2008, DUE Library, ISBN-10: 0470531886, ISBN-13: 978-0470531884 Szegedi, Z.: Case studies to logistics management, Kossuth, 2008, DUE Library, ISBN: 9789630957922 				