	English course title	Course type/exam	Semester - hour/week						credit	Prerequisite	Instructor-in-charge
			1	2	3	4	5	6			
	Obligatory courses										
	Introduction to mathematical analysis	practice/mark	2						**2**		Dr. Tóth György
	Introduction to advanced mathematics	practice/mark	3						**3**		Dr. Tóth György
	Computer technology I.	lecture/oral	2						**2**		Dr. Almási Gábor
	Computer programming I.	practice/mark	2						**2**		Dr. Mechler Mátyás
	Linear algebra	lect+pract/oral	2+2						**4**		Dr. Frigyik András
	Introduction to astronomy	lecture/oral	2						**2**		Dr. Gyenizse Péter
	Software packages	practice/mark		2					**2**		Dr. Mechler Mátyás
	Operating Systems	lecture/oral		2					**3**		Dr. Almási Gábor
	Computer programming II.	practice/mark		2					**3**		Dr. Mechler Mátyás
	Problem solving in Physics	practice/mark	3						**3**		Dr. Pálfalvi László
	Introductory mechanics lecture	lecture/oral	2						**2**		Dr. Buzády Andrea
	Introductory mechanics seminar	seminar/mark	2						**2**		Dr. Buzády Andrea
	Introductory mechanics practical course	practice/mark	3						**3**		Dr. Buzády Andrea
	Introductory thermodynamics lecture	lecture/oral		2					**2**		Dr. Pálfalvi László
	Introductory thermodynamics practical course	practice/mark		3					**3**		Dr. Pálfalvi László
	Waves and optics lecture	lecture/oral		2					**2**		Dr. Erostyák János
	Waves and optics seminar	seminar/mark		2					**2**		Dr. Erostyák János
	Waves and optics practical course	practice/mark		2					**2**		Dr. Erostyák János
	Mathematical methods in physics I.	practice/mark		3					**3**	Basic mathematics AND Introduction to advanced mathematics	Dr. Tóth György

	Subject	Type/assessment							Credit	Prerequisite	Instructor
	Basic calculus	lecture/oral		3					**3**	Basic mathematics	Dr. Gál Tamás
	Electricity and magnetism lecture	lecture/oral			2				**2**	Basic mathematics	Dr. Almási Gábor
	Electricity and magnetism seminar	seminar/mark			2				**2**	Basic mathematics	Dr. Almási Gábor
	Electricity and magnetism practical course	practice/mark			2				**2**	Basic mathematics	Dr. Almási Gábor
	Modern physics I. lecture	seminar/mark			3				**3**	Basic mathematics	Dr. Fülöp József
	Physics laboratory I.	lab/mark			4				**4**	Basic mathematics	Dr. Buzády Andrea
	Mechanics lecture	lecture/oral			2				**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Paragi Gábor
	Mechanics practical course	practice/mark			2				**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Paragi Gábor
	Mathematical methods in physics II.	practice/mark			3				**3**	Basic mathematics AND Introduction to advanced mathematics	Dr. Tóth György
	Computer algebra lecture	lecture/oral			2				**2**	Basic mathematics	Dr. Tibai Zoltán
	Computer algebra practical course	practice/mark			2				**3**	Basic mathematics	Dr. Tibai Zoltán
	Metrology lecture	lecture/oral			2				**2**	Basic mathematics	Dr. Márton Zsuzsanna
	Metrology practical course	practice/mark			1				**1**	Basic mathematics	Dr. Márton Zsuzsanna
	Modern physics II. lecture	seminar/mark				3			**3**	Basic mathematics	Dr. Fülöp József
	Physics laboratory II.	lab/mark				4			**4**	Basic mathematics	Dr. Buzády Andrea
	Electrodynamics lecture	lecture/oral				2			**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Pálfalvi László
	Electrodynamics practical course	practice/mark				2			**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Pálfalvi László

	Course	Evaluation								Credit	Prerequisite	Lecturer
	Mathematical methods in physics III.	practice/mark					2			**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Tóth György
	Numerical methods lecture	lecture/oral					2			**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Tóth György
	Numerical methods practical course	practice/mark					2			**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Tóth György
	Electronics lecture	lecture/oral						2		**2**	Basic mathematics	Dr. Almási Gábor
	Electronics practical course	practice/mark						2		**2**	Basic mathematics	Dr. Almási Gábor
	Quantum mechanics lecture	lecture/oral						2		**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Gál Tamás
	Quantum mechanics practical course	practice/mark						2		**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Gál Tamás
	Statistical physics lecture	seminar/mark							2	**2**	Basic mathematics AND Introduction to advanced mathematics	Dr. Gál Tamás
	Thesis consultation I.	seminar/mark						5		**5**		
	Thesis consultation II.	seminar/mark							5	**5**	Thesis consultation I.	
	IT Physics specialisation									**55**		
	Computer algebra (at least 8 credit)									**8**		
	Computational physics modul (at least 21 credit)									**21**		
	Visualization modul (at least 5 credit)									**5**		

			autumn	spring							
	Databases modul (at least 5 credit)									**5**		
	Programing modul (at least 3 credit)									**3**		
	others, seee below (at least 13)									**13**		
	Elective courses			autumn	spring							
Theoretical physics modul	Mechanics seminar	seminar/mark	2							**3**	Basic mathematics	Dr. Paragi Gábor
	Electrodynamics seminar	seminar/mark		2						**3**	Basic mathematics	Dr. Pálfalvi László
	Quantum mechanics seminar	seminar/mark	2							**3**	Basic mathematics	Dr. Gál Tamás
Applied mathematics modul	Numerical methods in physics I.	seminar/mark	3							**3**	Numerical methods lecture AND practice	Dr. Tóth György
	Applied linear algebra lecture	lecture/oral		2						**2**		Dr. Simon Ilona
	Applied linear algebra practical course	practice/mark		2						**2**		Dr. Simon Ilona
Visualzation modul	Visualization techniques	practice/mark	2							**3**	Basic mathematics	Dr. Almási Gábor
	CAD I.	practice/mark	2							**2**	Basic mathematics	Dr. Polónyi Gyula
	CAD II.	practice/mark		2						**2**	Basic mathematics	Dr. Polónyi Gyula
Computer algebra modul	Computer algebra II. lecture	lecture/oral		2						**2**	Basic mathematics	Dr. Tibai Zoltán
	Computer algebra II. practical course	practice/mark		2						**3**	Basic mathematics	Dr. Tibai Zoltán
	MATLAB I	practice/mark		3						**3**	Basic mathematics	Dr. Mechler Mátyás
	MATLAB II	practice/mark	2							**2**	Basic mathematics	Dr. Mechler Mátyás
Programming modul	LabView basics	practice/mark		2						**3**	Basic mathematics	Dr. Márton Zsuzsanna
	LabView II.	practice/mark	2							**3**	LabView basics	Dr. Márton Zsuzsanna
	Basic of Python	practice/mark		3						**3**		Bodor András
	Scientific programming in Python	practice/mark		3						**3**		Bodor András
	Basics of C#	lect+pract/mark		3						**3**		Dr. Zentai Norbert
	Software development technologies	lect+pract/mark		1+3						**5**		Kiss-Vincze tamás
	Frontend frameworks	practice/mark		2						**3**		Rébay Viktor
	Web programming I.	lect+pract/mark	4							**5**		Rébay Viktor
	Web programming II.	lect+pract/mark		4						**5**	Web programming I.	Rébay Viktor

Databases modul	Relation databases lecture	lect+pract/mark	2+2					5		Dr. Laczkó József
	State-of-art database systems	lect+pract/mark		2+2				5		Dr. Pauler Gábor
Discrete mathematics modul	Discrete mathematics lecture	lect+pract/oral	2+2					5		Dr. Szabó Sándor
	Discrete mathematics lecture	lect+pract/oral		2+2				5		Dr. Jenei Sándor
Computational physics modul	Microcontroller programming	lab/mark	4					4	Computer programming I.	Dr. Almási Gábor
	Computer programming III.	practice/mark	4					4	Computer programming I.	Dr. Mechler Mátyás
	Computer networks lecture	lecture/oral	2					2		Dr. Mechler Mátyás
	Computer networks practical course	practice/mark	2					2		Dr. Mechler Mátyás
	Computer technology II.	lecture/oral		2				3		Dr. Almási Gábor
	Digital measurements	lab/mark	2					3	Basic mathematics	Dr. Márton Zsuzsanna
	Multiphysics	practice/mark		3				3	Basic mathematics	Dr. Tibai Zoltán
	Algorithms, data structures lecture	lect+pract/mark		2+2				5		Dr. Jenei Sándor
Matematikai analízis tantárgycsoport	Calculus I. lecture	lecture/oral	3					4	Basic mathematics	Dr. Pap Margit
	Calculus I. practice	practice/mark	2					2	Basic mathematics	Dr. Pap Margit
	Calculus II. lecture	lecture/oral		3				4	Calculus I. lecture AND practice	Dr. Pap Margit
	Calculus II. practice	practice/mark		2				2	Calculus I. lecture AND practice	Dr. Pap Margit
	Calculus III. lecture	lecture/oral	2					2	Calculus II. lecture AND practice	Dr. Pap Margit
	Calculus III. practice	practice/mark	2					2	Calculus II. lecture AND practice	Dr. Pap Margit
	Calculus III. lecture	lecture/oral		2				2	Calculus III. lecture AND practice	Dr. Pap Margit
	Calculus III. practice	practice/mark		2				2	Calculus III. lecture AND practice	Dr. Pap Margit
	Complex function lecture	lecture/oral		2				2		Dr. Pap Margit
	Complex function practice	practice/mark		2				2		Dr. Pap Margit

Module	Course	Type/eval	1	2					Credit	Prerequisite	Instructor
	Ordinary differntial equations	lect+pract/mark		2+1					**4**		Dr. Frigyik András
	Partial differential equations	lect+pract/mark	2+1						**4**	Ordinary differntial equations	Dr. Frigyik András
	Fourier series	lecture/oral		3					**5**		Dr. Eisner Timea
Physics laboratory modul	Physics laboratory III.	lab/mark	4						**4**	Basic mathematics	Dr. Buzády Andrea
Optics modul	Optical measurement methods lecture	lecture/oral	2						**2**	Basic mathematics	Dr. Erostyák János
	Optical measurement methods laboratory	lab/mark		2					**2**	Basic mathematics	Dr. Erostyák János
	Generation and application of THz pulses	lecture/oral	2						**2**	Waves and optics	Dr. Hebling János
	Fluorescence spectroscopy	lecture/oral	2						**2**	Waves and optics	Dr. Erostyák János
	THz spectroscopy	lecture/oral		2					**3**	Electrodynamics	Dr. Buzády Andrea
	Lasers and their applications	lecture/oral		2					**2**	Waves and optics	Dr. Hebling János
Other elective courses	Document preparation with LaTeX	practice/mark		2					**3**		Dr. Mechler Mátyás
	Introduction into Maxima	practice/mark		2					**2**		Dr. Mechler Mátyás
	Astrophysics	lecture/oral	2						**2**		Dr. Bíró Barna Imre
	History of physics	lecture/oral		2					**2**	Electrodynamics	Dr. Buzády Andrea
	Meteorology	lecture/oral		2					**2**		Dr. Geresdi István
	Advanced measurement instrumentation	lecture/oral		2					**3**	Electricity and magnetism	Dr. Buzády Andrea
	Computational molecular modelling	seminar/mark		2					**3**		Dr. Paragi Gábor
	Density functional theory	seminar/mark		2					**3**	Quantum mechanics	Dr. Paragi Gábor
	Talent promotion and physics olymiads	seminar/mark	3						**3**		Dr. Pálfalvi László
	Analogies in physics	seminar/mark	3						**3**		Dr. Pálfalvi László
	Advanced mathematical methods in physics	seminar/mark	2						**2**		Bódog Ferenc

	Course	Type/Assessment							Credits	Prerequisite	Instructor
	Waveguide optics	lecture/oral		2					**2**		Dr. Kuhlevszkij Szergej
	Plasma physics	lecture/oral		2					**2**		Dr. Kuhlevszkij Szergej
	X-ray lasers	lecture/oral		2					**2**		Dr. Kuhlevszkij Szergej
	Fundamentals of particles accelaration	seminar/mark	3						**3**	Electrodynamics	Dr. Tibai Zoltán
	Applications of the optical desingns	practice/mark	2						**4**		Dr. Pálfalvi László
	Facultative courses - 10 credits to be completed										