

Study plan for the academic year 2012/13 for the follow-up master study programme BMCT, field of study Biomedical Engineering in English (full-time study)

Specialization: Medical Imaging Instrumentation

Valid for students who entered the study from the academic year 2012/13

Guaranteeing department: Department of Biomedical Technology - KBT 17110, Head of the department: prof. Ing. Peter Kneppo, DrSc.

Guarantor of the field of study: doc. Ing. Karel Roubík, Ph.D. (Deputy guarantor: Ing. Martin Rožánek, Ph.D.)

Code	Lecturer	Obligation	Load	Credits	Conclusion	Lecturer	Guaranteeing department
1st year 1st semester (14 weeks)							
17AMBAF1	Anatomy and Physiology I	P	2+2	5	z, zk	<u>prof. MUDr. Ivan Dylevský, DrSc.</u>	FBMI KLHO
17AMBNMP	Project Proposal and Management	P	1+1	2	kl. z	<u>doc. Ing. Jiří Hozman, Ph.D. a kol.</u>	FBMI KBT
17AMBBCH	Biochemistry	P	1+1	2	kl. z	<u>Ing. Martina Vermachová</u>	FBMI KBT
17AMBZS	Imaging Systems	P	2+2	4	z, zk	<u>doc. Ing. Jiří Hozman, Ph.D., Ing. Martin Rožánek, Ph.D.</u>	FBMI KBT
17AMBZMB	Fundamentals of Molecular Biology	P	2+2	5	z, zk	<u>Mgr. Veronika Vymětalová, RNDr. Taťána Jarošíková, CSc.</u>	FBMI KPO
17AMBLPZ	Medical Devices&Equipment	P	2+2	5	z, zk	<u>doc. Ing. Karel Roubík, Ph.D., Ing. Richard Grünes, Ph.D.</u>	FBMI KBT
17AMBBB	Biomechanics and Biomaterials	P	2+2	4	z, zk	<u>Ing. Patrik Kutílek</u>	FBMI KPO
17AMB???	Compulsory optional course see the list below	PV		3	z	see the list below	FBMI
1st year 2st semester (14weeks)							
17AMBAF2	Anatomy and Physiology II	P	2+2	5	z, zk	<u>prof. MUDr. Ivan Dylevský, DrSc.</u>	FBMI KLHO
17AMBEBI	Ethics in Biomedical Engineering	P	2+0	2	kl. z	<u>Ing. Václav Navrátil</u>	FBMI KLHO
17AMBPIZ	Work with Information Sources and Research Methodology	P	2+0	2	kl. z	<u>doc. Ing. Karel Roubík, Ph.D.</u>	FBMI KBT
17AMBBLS	Biological Signals	P	2+2	4	z, zk	<u>doc. Ing. Vladimír Krajča, CSc.</u>	FBMI KBT
17AMBBTR	Biotransport	P	2+2	4	z, zk	<u>prof. MUDr. Pavel Kučera, Ph.D.</u>	FBMI KPO
17AMBZPD	Fundamentals of Pathophysiology&Diagnostic Methods	P	1+1	5	z, zk	<u>prof. MUDr. Leoš Navrátil, CSc.</u>	FBMI KLHO
17AMBOP	Practical Training Placement (Hospital Homolka - Individual Agreement is Possible)	P	2 týdny	5	z	<u>doc. Ing. Jiří Hozman, Ph.D.</u>	FBMI KBT
17AMB???	Compulsory optional course see the list below	PV		3	z	see the list below	FBMI

2nd year 3rd semester (14 weeks)							
Code	Course	Obligation	Load	Credits	Conclusion	Lecturer	Guaranteeing department
17AMBAOL	Applied Optoelectronics in Medicine	P	2+2	4	kl. z	<u>prof. Dr.Ing. Dr.h.c. Vladimír Blažek</u>	FBMI KPO
17AMBZAO	Image Processing and Analysis	P	1+1	2	kl. z	<u>prof. Ing. Václav Hlaváč, CSc., Ing. Zoltán Szabó, Ph.D.</u>	FBMI KBI
17AMBZSN	Nuclear Medicine Imaging Systems	P	1+1	2	kl. z	<u>Ing. Helena Trojanová, CSc.</u>	FBMI KBT
17AMBUDS	Ultrasound and Doppler Imaging Systems	P	1+1	2	kl. z	<u>doc. Ing. Jiří Hozman, Ph.D., Ing. Martin Rožánek, Ph.D.</u>	FBMI KBT
17AMBZMI	Ionizing Radiation Imaging	P	2+0	2	kl. z	<u>Ing. Jan Jakůbek, Ph.D.</u>	FBMI KPO
17AMBTTE	Television, Thermovision and Endoscopic Imaging Systems	P	1+1	2	kl. z	<u>prof. Ing. Miloš Klíma, CSc., doc. Mgr. Petr Páta, Ph.D., doc. Ing. Jiří Hozman, Ph.D.</u>	FBMI KBT
17AMBZMR	Magnetic Resonance Imaging and Impedance Tomography	P	2+0	2	kl. z	<u>doc. Ing. Karel Roubík, Ph.D., Ing. Martin Rožánek, Ph.D.</u>	FBMI KBT
17AMBMMM	Microscopy in Medicine	P	2+0	2	kl. z	<u>prof. Ing. Miroslav Jelínek, DrSc., doc. Ing. Jiří Hozman, Ph.D.</u>	FBMI KPO
17AMBVOB	Fiber Optics for Biomedicine	P	2+0	2	kl. z	<u>Ing. Marie Pospíšilová, CSc.</u>	FBMI KPO
17AMBPD	Diploma Thesis Proposal	P	0+4	7	z	<u>doc. Ing. Vladimír Krajča, CSc. + jednotliví vedoucí diplomových prací</u>	FBMI KBT
17AMB???	Compulsory optional course see the list below	PV		3	z	see the list below	FBMI
2nd year 4th semester (14 weeks)							
17AMBDP	Diploma Thesis	P	0+30	30	z	<u>doc. Ing. Vladimír Krajča, CSc. + individual supervisors of the diploma thesis</u>	FBMI KBT

List of offered compulsory optional courses in 1st semester

Kód	Předmět	Záv.	Roz. P+C	Kredity	Zakon.	Vyučující	Garant. prac.
17AMBCC1	Czech for Foreigners I	PV	0+4	3	z	Hana Rogalewiczová	FBMI KBT
17AMBJAA	English Language A	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT
17AMPVA1	Presenting One's Results in English I	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT

List of offered compulsory optional courses in 2nd semester

Kód	Předmět	Záv.	Roz. P+C	Kredity	Zakon.	Vyučující	Garant. prac.
17AMBCC2	Czech for Foreigners II	PV	0+4	3	z	<u>Hana Rogalewiczová</u>	FBMI KBT
17AMBJAB	English Language B	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT
17AMPVA2	Presenting One's Results in English II	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT

List of offered compulsory optional courses in 3rd semester

Kód	Předmět	Záv.	Roz. P+C	Kredity	Zakon.	Vyučující	Garant. prac.
17AMBCC1	Czech for Foreigners I	PV	0+4	3	z	<u>Hana Rogalewiczová</u>	FBMI KBT
17AMBJAA	English Language A	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT
17AMPVA1	Presenting One's Results in English I	PV	0+4	3	z	<u>Mgr. Eva Motyčková</u>	FBMI KBT

P Optional course
PV Compulsory optional course

z assessment
kl.z. graded assessment
zk examination