KAUNAS UNIVERSITY OF TECHNOLOGY

STUDY PROGRAMME

Public code	6121EX012	
ISCED code	6450714	
Level and/or type	University studies	
Study cycle	First cycle, undergraduate (Bachelor)	
Study area		
Study field and code		
Programme title	Electronics Engineering	
Specialization areas	Biomedical Electronics; Electronics Engineering;	
Programme workload in national credits	240	
Programme workload in ECTS credits	240	
Mode of studies	Part-time studies	Full-time studies
Official length of studies	6	4
Minimum access requirements	Secondary	
Minimum access qualification degree		
Access conditions and requirements		
Qualification degree conferred	Bachelor of Engineering Sciences	
Professional qualification conferred		
Date of programme establishment (No. of Senate Decree, date)	21 1992-12-16	
Reason of programme registration in state register (No. of Decree , date)	Švietimo ir mokslo ministro įsakymas, 565, 565 1997-05-19	
Accreditation date and its expiry date	Akredituota 2014-08-11 iki 2020-09-01	
Accreditation status		
Accreditation institution		
Programme closing date (No. of Senate decree, date)		
Date of programme signing out (No. of Decree of Minister of Education, date)		

Main aim

To prepare the qualified specialist who has electronic engineering knowledge, is able to analyse and solve technical problems of electronics engineering, telecommunication and biomedical electronics, who has knowledge of principles, methods and tools of electronic devices and systems design and maintenance, and is able to develop their software; who is capable of applying knowledge and understanding individually and in a team and is capable of self-improvement through lifelong learning.

Programme objectives (knowledge and abilities provided)

1. Knowledge and understanding

2. Intellectual abilities

3. Practical abilities and skills

4. General transferable abilities and skills

Specialization description

1. Biomedical Electronics

Graduate The graduate has the basic knowledge of electronics engineering and knows and understands the field of biomedical engineering. He/she is able to apply the principles and techniques of electronic engineering in designing, installing and maintaining biomedical electronic equipment.

2. Electronics Engineering

Graduate A graduate is able to analyze and solve technical problems. He/she also knows the principles, methods and tools of electronic devices and systems design including knowledge about high-frequency systems. He/she is able to design, program, install and maintain embedded and wireless systems.

Special features of programme implementation

Access to further study

S/he has access to the second cycle studies

Professional status and career opportunities (including state regulated professions in case the qualification conferred gives such a right)

The graduate can work in a field of electronic systems design, production, installation and maintenance, can work as an engineer, is capable to do technical work and management in companies of the electronic field or successfully develop his/her own business.

Summary

A graduate has the broad and integrated knowledge of fundamental electronics circuit theory, signals and systems, electrodynamics, wireless technology, innovative telecommunication technology, biomedical engineering, medical electronics, biomedical sensor knowledge, computer science and technology components and devices. The graduate has the ability to formulate and solve technical engineering problems of electronics, understands the problems of clinical engineering, knows the methods and tools of electronic devices and systems design, and is able to develop electronic systems software.

Programme structure

Full-time studies

Code	F	Course	Cr.	Contact hrs	Semester								Coordinating Lecturer
					1	2	3	4	5	6	7	8	
General Subjects of University Studies													
		Electives of Philosophy 2019	6		x								
		Foreign Language Electives (Level C1) 2019	6					x					
		Total of Credits:	**12**		**6**			**6**					
Core Subjects of Engineering													
T230B712	1	Engineering Graphics	3	40	x								Assoc. Prof. L. Šeduikytė
P175B144	1	Information Technologies for Engineers	6	64		x							Lect. J. Platužienė
T210B168	1	Engineering Mechanics	6	80		x							Assoc. Prof. V. Eidukynas
T170B202	1	Electronics	6	80			x						Assoc. Prof. D. Pagodinas
		Total of Credits:	**21**		**3**	**12**	**6**						
Mathematics and Physical Sciences Subjects													
P130B001	1	Mathematics 1	6	80	x								Assoc. Prof. L. Saunorienė, Assoc. Prof. N. Listopadskis
P190B101	1	Physics 1	6	80	x								Prof. G. Laukaitis
P130B002	1	Mathematics 2	6	80		x							Assoc. Prof. S. Petraitienė, Prof. E. Valakevičius
P230B202	1	Physics 2	6	80		x							Assoc. Prof. R. Naujokaitis
P160B003	1	Theory of Probability and Statistics	6	64			x						Assoc. Prof. J. Dabulytė-Bagdonavičienė, Prof. E. Valakevičius
		Total of Credits:	**30**		**12**	**12**	**6**						
Social Sciences Subjects													
		Electives of Personality and Health Development 2019	3						x				
		Electives of Socioeconomic Environment Knowledge 2019	6						x				
		Electives of Entrepreneurship Education 2019	6							x			
		Total of Credits:	**15**						**9**	**6**			
Core Field Subjects													
T190B261	1	Materials Science and Engineering	6	64	x								Prof. V. Markevičius
T190B014	1	Circuit Theory 1	6	80		x							Assoc. Prof. D. Jegelevičius
T170B121	1	Programming of Electronic Systems	6	60			x						Assoc. Prof. V. Knyva
T190B263	1	Circuit Theory 2	6	80			x						Assoc. Prof. D. Jegelevičius
T121B201	1	Signals and Systems 1	6	80				x					Prof. V. Dumbrava
T170B159	1	Applied Electrodynamics	6	96				x					Assoc. Prof. D. Kybartas
T170B301	1	Digital Devices	6	64				x					Assoc. Prof. A. Chaziachmetovas
T170B303	1	Analogue Devices	6	80				x					Assoc. Prof. V. Knyva
T110B401	1	Basics of Measurements and Metrology	6	80					x				Prof. D. Gailius
T125B361	1	Automatic Control Theory	6	64					x				Assoc. Prof. A. Knyš, Assoc. Prof. A. Dervinienė
T170B135	1	Basics of Computer-aided Design of Electronics Systems	3	44					x				Assoc. Prof. V. Knyva
T170B317	1	Microprocessors	6	80					x				Prof. V. Deksnys
T121B106	1	Discrete Time Signal Processing	6	64						x			Prof. L. Svilainis
T170B158	1	Electronics Manufacturing Technologies	6	80						x			Assoc. Prof. M. Žilys
T170B417	1	Embedded Systems	6	80						x			Prof. V. Deksnys
T121B002	1	Signal Transmission and Reception	6	58							x		Assoc. Prof. M. Knyva
		Total of Credits:	**93**		**6**	**6**	**12**	**24**	**21**	**18**	**6**		
Major Field Subjects													
		Specialization Electives	30							x	x		
		Total of Credits:	**30**							**6**	**24**		
Practice													
T000B146	1	Training Practice	3	48	x								Assoc. Prof. D. Kybartas
PR00B162	1	Practice	15									x	Assoc. Prof. M. Knyva
		Total of Credits:	**18**		**3**							**15**	
Final Degree Project													
PR00B160	1	Final Degree Project	15	12								x	Prof. Ž. Nakutis, Prof. S. Petronienė
		Total of Credits:	**15**									**15**	
Optional Subjects (Amount in Credits)													
		Optional Subjects 2019	6				6						
Total of Credits													

Per Study Programme and per Semester	**240**		**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	

Specialization Subjects

Code	F	Course	Cr.	Contact hrs	Semester Recommended		Coordinating Lecturer
					6 sem. 6 cr.	7 sem. 24 cr.	
Biomedical Electronics							
T170B161	1	Biomedical sensors and systems	6	64	x		Prof. V. Marozas
B140B001	1	Clinical Engineering Systems	6	64		x	Assoc. Prof. R. Jurkonis
T001B010	1	Design of Biomedical Electronics System	6	64		x	Prof. L. Svilainis
Electronics Engineering							
T000B231	1	Semester Project	6	16		x	Prof. D. Navikas
		Electives 1	6		x		
		Electives 2	6			x	
		Electives 3	12			x	

Electives

Code	F	Course	Cr.	Contact hrs	Semester Recommended		Coordinating Lecturer
					6 sem. 6 cr.	7 sem. 18 cr.	
Electives 1							
T110B002	1	Graphical Programming	6	48	x		Assoc. Prof. M. Knyva
T170B115	1	Radio Frequency Engineering	6	64	x		Assoc. Prof. P. Kuzas
T170B407	1	Video and Audio Technologies	6	48	x		Assoc. Prof. P. Kaškonas
T180B119	1	Design of Wireless Networks	6	64	x		Assoc. Prof. V. Grimaila
Electives 2							
T170B008	1	Computer Communications	6	32		x	Prof. V. Deksnys
T170B402	1	Sensors	6	64		x	Prof. D. Andriukaitis
T180B106	1	Programming Environments of Telecommunication Systems	6	48		x	Assoc. Prof. R. Brūzgienė
Electives 3							
T121B105	1	Navigation and Imaging Systems	6	64		x	Prof. L. Svilainis
T170B004	1	Video Systems	6	64		x	Assoc. Prof. P. Kaškonas
T170B114	1	Programmable Logic Devices	6	40		x	Prof. Ž. Nakutis
T170B129	1	Basics of Biomedical Engineering	6	48		x	Prof. V. Marozas
T180B121	1	Information Security in Wireless Networks	6	64		x	Assoc. Prof. S. Japertas

General Electives

Code	F	Course	Cr.	Contact hrs	Semester Recommended				Coordinating Lecturer
					1 sem. 6 cr.	4 sem. 6 cr.	5 sem. 9 cr.	6 sem. 6 cr.	
Electives of Philosophy 2019									
H120B111	1	Media Philosophy	6	64	x				Assoc. Prof. N. Čepulis
H120B031	1	Philosophy	6	64	x				Lect. A. Bingelis
Foreign Language Electives (Level C1) 2019									
H570B104	1	English Language (Level C1)	6	80		x			Prof. S. Petronienė
H460B104	1	French Language (Level C1)	6	80		x			Lect. R. Vingelienė
H530B101	1	German Language (Level C1)	6	80		x			Lect. J. Maksvytytė
H595B103	1	Russian Language (level C1)	6	80		x			Lect. L. Kravcova
Electives of Personality and Health Development 2019									
S264B001	1	Applied Psychology	3	32			x		Prof. R. Lekavičienė
S265B010	1	Basics of Communication	3	32			x		Assoc. Prof. J. Vizgirdaitė
S280B105	1	Career Creation	3	32			x		Assoc. Prof. V. Stanišauskienė
B710B001	1	Health Education for the Sportsmen Persons	3	32			x		Assoc. Prof. I. Klizienė, Assoc. Prof. A. Domeika
B710B195	1	Personal Health Education	3	32			x		Assoc. Prof. I. Klizienė, Assoc. Prof. A. Domeika
Electives of Socioeconomic Environment Knowledge 2019									
S180B103	1	Engineering Economics	6	64			x		Assoc. Prof. V. Gižienė
S210B003	1	Sustainable Human Development	6	64			x		Assoc. Prof. A. Balžekienė, Prof. L. Kliučininkas, Prof. Ž. Stasiškienė
Electives of Entrepreneurship Education 2019									
S192B114	1	Fundamentals of Enterprises Accounting and Financial Management	6	64				x	Assoc. Prof. Š. Leitonienė

S190B377	1	Fundamentals of Enterprises Management	6	64				x	Assoc. Prof. K. Duoba
S191B017	1	Marketing	6	64				x	Lect. J. Maščinskienė
S000B177	1	Technology Entrepreneurship	6	64				x	Assoc. Prof. R. Jucevičienė, Assoc. Prof. A. Liutkevičius, Assoc. Prof. A. Domeika, Prof. D. Martuzevičius, Assoc. Prof. S. Japertas

Faculty implementing the programme

Faculty	Code
Faculty of Electrical and Electronics Engineering	03

Part-time studies

Code	F	Course	Cr.	Contact hrs	Semester												Coordinating Lecturer
					1	2	3	4	5	6	7	8	9	10	11	12	
General Subjects of University Studies																	
H120B031	1	Philosophy	6	64						x							Lect. A. Bingelis
		Foreign Language Electives (Level C1) 2019	6					x									
		Total of Credits:	**12**					**6**		**6**							
Core Subjects of Engineering																	
T230B712	1	Engineering Graphics	3	40	x												Assoc. Prof. L. Šeduikytė
P175B144	1	Information Technologies for Engineers	6	64		x											Lect. J. Platužienė
T210B168	1	Engineering Mechanics	6	80		x											Assoc. Prof. V. Eidukynas
T170B202	1	Electronics	6	80					x								Assoc. Prof. D. Pagodinas
		Total of Credits:	**21**		**3**	**12**			**6**								
Mathematics and Physical Sciences Subjects																	
P130B001	1	Mathematics 1	6	80	x												Assoc. Prof. L. Saunorienė, Assoc. Prof. N. Listopadskis
P130B002	1	Mathematics 2	6	80		x											Assoc. Prof. S. Petraitienė, Prof. E. Valakevičius
P160B003	1	Theory of Probability and Statistics	6	64			x										Assoc. Prof. J. Dabulytė-Bagdonavičienė, Prof. E. Valakevičius
P190B101	1	Physics 1	6	80			x										Prof. G. Laukaitis
P230B202	1	Physics 2	6	80				x									Assoc. Prof. R. Naujokaitis
		Total of Credits:	**30**		**6**	**6**	**12**	**6**									
Social Sciences Subjects																	
		Electives of Personality and Health Development 2019	3		x												
		Electives of Socioeconomic Environment Knowledge 2019	6						x								
		Electives of Entrepreneurship Education 2019	6										x				
		Total of Credits:	**15**		**3**				**6**				**6**				
Core Field Subjects																	
T190B261	1	Materials Science and Engineering	6	64	x												Prof. V. Markevičius
T170B121	1	Programming of Electronic Systems	6	60			x										Assoc. Prof. V. Knyva
T190B014	1	Circuit Theory 1	6	80			x										Assoc. Prof. D. Jegelevičius
T190B263	1	Circuit Theory 2	6	80				x									Assoc. Prof. D. Jegelevičius
T170B159	1	Applied Electrodynamics	6	96					x								Assoc. Prof. D. Kybartas
T121B201	1	Signals and Systems 1	6	80						x							Prof. V. Dumbrava
T170B303	1	Analogue Devices	6	80						x							Assoc. Prof. V. Knyva
T121B002	1	Signal Transmission and Reception	6	58							x						Assoc. Prof. M. Knyva
T125B361	1	Automatic Control Theory	6	64							x						Assoc. Prof. A. Knyš, Assoc. Prof. A. Dervinienė
T170B135	1	Basics of Computer-aided Design of Electronics Systems	3	44								x					Assoc. Prof. V. Knyva
T170B158	1	Electronics Manufacturing Technologies	6	80								x					Assoc. Prof. M. Žilys
T170B301	1	Digital Devices	6	64								x					Assoc. Prof. A. Chaziachmetovas
T121B106	1	Discrete Time Signal Processing	6	64									x				Prof. L. Svilainis
T170B317	1	Microprocessors	6	80									x				Prof. V. Deksnys
T110B401	1	Basics of Measurements and Metrology	6	80										x			Prof. D. Gailius
T170B417	1	Embedded Systems	6	80										x			Prof. V. Deksnys

Total of Credits:			**93**		**6**		**12**	**6**	**6**	**12**	**12**	**15**	**12**	**12**			
Major Field Subjects																	
		Specialization Electives	30									x	x	x	x		
Total of Credits:			**30**									**6**	**6**	**6**	**12**		
Practice																	
T000B146	1	Training Practice	3	48	x											Assoc. Prof. D. Kybartas	
PR00B162	1	Practice	15												x	Assoc. Prof. M. Knyva	
Total of Credits:			**18**		**3**										**15**		
Final Degree Project																	
PR00B160	1	Final Degree Project	15	12											x	Prof. Ž. Nakutis, Prof. S. Petronienė	
Total of Credits:			**15**												**15**		
Optional Subjects (Amount in Credits)																	
		Optional Subjects 2019	6							6							
Total of Credits																	
Per Study Programme and per Semester			**240**		**21**	**18**	**24**	**18**	**18**	**18**	**18**	**21**	**24**	**18**	**12**	**30**	

Specialization Subjects

Code	F	Course	Cr.	Contact hrs	Semester Recommended				Coordinating Lecturer
					8 sem. 6 cr.	9 sem. 6 cr.	10 sem. 6 cr.	11 sem. 12 cr.	
Biomedical Electronics									
T170B161	1	Biomedical sensors and systems	6	64	x				Prof. V. Marozas
B140B001	1	Clinical Engineering Systems	6	64				x	Assoc. Prof. R. Jurkonis
T001B010	1	Design of Biomedical Electronics System	6	64				x	Prof. L. Svilainis
Electronics Engineering									
T000B231	1	Semester Project	6	16				x	Prof. D. Navikas
		Electives 1	6		x				
		Electives 2	6				x		
		Electives 3	12			x		x	

Electives

Code	F	Course	Cr.	Contact hrs	Semester Recommended				Coordinating Lecturer
					8 sem. 6 cr.	9 sem. 6 cr.	10 sem. 6 cr.	11 sem. 6 cr.	
Electives 1									
T110B002	1	Graphical Programming	6	48	x				Assoc. Prof. M. Knyva
T170B115	1	Radio Frequency Engineering	6	64	x				Assoc. Prof. P. Kuzas
T170B407	1	Video and Audio Technologies	6	48	x				Assoc. Prof. P. Kaškonas
T180B119	1	Design of Wireless Networks	6	64	x				Assoc. Prof. V. Grimaila
Electives 2									
T170B008	1	Computer Communications	6	32			x		Prof. V. Deksnys
T170B402	1	Sensors	6	64			x		Prof. D. Andriukaitis
T180B106	1	Programming Environments of Telecommunication Systems	6	48			x		Assoc. Prof. R. Brūzgienė
Electives 3									
T121B105	1	Navigation and Imaging Systems	6	64		x			Prof. L. Svilainis
T170B004	1	Video Systems	6	64		x			Assoc. Prof. P. Kaškonas
T170B114	1	Programmable Logic Devices	6	40		x			Prof. Ž. Nakutis
T170B129	1	Basics of Biomedical Engineering	6	48		x			Prof. V. Marozas
T180B121	1	Information Security in Wireless Networks	6	64		x			Assoc. Prof. S. Japertas
T121B105	1	Navigation and Imaging Systems	6	64				x	Prof. L. Svilainis
T170B004	1	Video Systems	6	64				x	Assoc. Prof. P. Kaškonas
T170B114	1	Programmable Logic Devices	6	40				x	Prof. Ž. Nakutis
T170B129	1	Basics of Biomedical Engineering	6	48				x	Prof. V. Marozas
T180B121	1	Information Security in Wireless Networks	6	64				x	Assoc. Prof. S. Japertas

General Electives

Code	F	Course	Cr.	Contact hrs	Semester Recommended	Coordinating Lecturer

					1 sem. 3 cr.	4 sem. 6 cr.	5 sem. 6 cr.	9 sem. 6 cr.	
Electives of Personality and Health Development 2019									
S264B001	1	Applied Psychology	3	32	x				Prof. R. Lekavičienė
S265B010	1	Basics of Communication	3	32	x				Assoc. Prof. J. Vizgirdaitė
S280B105	1	Career Creation	3	32	x				Assoc. Prof. V. Stanišauskienė
B710B001	1	Health Education for the Sportsmen Persons	3	32	x				Assoc. Prof. I. Klizienė, Assoc. Prof. A. Domeika
B710B195	1	Personal Health Education	3	32	x				Assoc. Prof. I. Klizienė, Assoc. Prof. A. Domeika
Foreign Language Electives (Level C1) 2019									
H570B104	1	English Language (Level C1)	6	80		x			Prof. S. Petronienė
H460B104	1	French Language (Level C1)	6	80		x			Lect. R. Vingelienė
H530B101	1	German Language (Level C1)	6	80		x			Lect. J. Maksvytytė
H595B103	1	Russian Language (level C1)	6	80		x			Lect. L. Kravcova
Electives of Socioeconomic Environment Knowledge 2019									
S180B103	1	Engineering Economics	6	64			x		Assoc. Prof. V. Gižienė
S210B003	1	Sustainable Human Development	6	64			x		Assoc. Prof. A. Balžekienė, Prof. L. Kliučininkas, Prof. Ž. Stasiškienė
Electives of Entrepreneurship Education 2019									
S192B114	1	Fundamentals of Enterprises Accounting and Financial Management	6	64				x	Assoc. Prof. Š. Leitonienė
S190B377	1	Fundamentals of Enterprises Management	6	64				x	Assoc. Prof. K. Duoba
S191B017	1	Marketing	6	64				x	Lect. J. Maščinskienė
S000B177	1	Technology Entrepreneurship	6	64				x	Assoc. Prof. R. Jucevičienė, Assoc. Prof. A. Liutkevičius, Assoc. Prof. A. Domeika, Prof. D. Martuzevičius, Assoc. Prof. S. Japertas

Faculty implementing the programme

Faculty	Code
Faculty of Electrical and Electronics Engineering	03

Study programme committee

Study programme committee	Code
	EI-KSPK

Programme coordinator

Position	Pedagogical title, research degree	Surname, name	Payroll No
Assoc. Prof.		CHAZIACHMETOVAS Andrius	A630

Date of programme last amendment and the Faculty Council which confirmed it

2018			

Programme renewal date

2018		