KAUNAS UNIVERSITY OF TECHNOLOGY

STUDY PROGRAMME

Public code	6121EX013	
ISCED code	6450714	
Level and/or type	University studies	
Study cycle	First cycle, undergraduate (Bachelor)	
Study area		
Study field and code		
Programme title	Robotics	
Specialization areas		
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)	67 2010-12-08	
Reason of programme registration in state register (No. of Decree , date)	Švietimo ir mokslo ministerijos Studijų, mokslo ir technologijų departamento raštas SKVC, SR-990, SR-990 2011-03-10	
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 get basic knowledge in electrotechnics, electromechanics, electronics, automatic control, programing of robots, modeling and control of robotized systems, image processing and recognition, computational intelligence methods, to able to analyze and evaluate the potential application of robotic in industrial and social applications, to model and design the robotic 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 organizations of robotic system design, installation and maintenance, in companies applying robotic system or in ones developing and manufacturing the control systems of robots or other devices.

Summary

A graduate has knowledge in electrotechnics, electromechanics, electronics, automatic control, robot programming, the modelling and control of robotized systems, image processing and recognition, computational intelligence methods, is able to analyze and evaluate the potential application of robotics, to choose the robot hardware and software, to model and design robotic systems and orientation systems of robots, to deal with the problems of industrial and social application of robots.

Programme structure

Full-time studies

Code	F	Course	Cr.	Contact hrs	Semester 1	2	3	4	5	6	7	8	Coordinating Lecturer
General Subjects of University Studies													
		Electives of Philosophy 2018	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
P175B145	1	Introduction to Programming for Engineers	6	64		x							Lect. D. Barisas
T210B168	1	Engineering Mechanics	6	80		x							Assoc. Prof. V. Eidukynas
T240B003	1	Computer Drawing	3	40		x							Lect. A. Vasylius
T450B902	1	Engineering Materials	3	48		x							Assoc. Prof. R. Kandrotaitė Janutienė

T190B015	1	Analysis of Electric Circuits 1	6	80			x						Assoc. Prof. R. Lukočius
T190B010	1	Analysis of Electric Circuits 2	6	80				x					Assoc. Prof. R. Lukočius
T500B010	1	Work Safety	3	48							x		Prof. R. Adaškevičius
		Total of Credits:	**36**		**3**	**18**	**6**	**6**			**3**		
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 2018	3		x								
		Electives of Entrepreneurship Education 2019	6				x						
		Electives of Socioeconomic Environment Knowledge 2019	6						x				
		Total of Credits:	**15**		**3**		**6**		**6**				
Core Field Subjects													
T125B107	1	Control Technology	6	64	x								Assoc. Prof. G. Dervinis
T125B019	1	Software for Engineering Calculations	6	64			x						Assoc. Prof. K. Ratkevičius
T125B147	1	Kinematics, Statics and Dynamics of Robots	6	80			x						Assoc. Prof. R. Rimašauskienė
T170B466	1	Applied Electronics	6	80				x					Prof. A. Dosinas
T190B202	1	Electromechanics	6	80				x					Assoc. Prof. A. Kalvaitis
T190B302	1	Electric Drives	6	64				x					Assoc. Prof. A. Lipnickas
T125B123	1	Automation Devices and Systems	9	96					x				Assoc. Prof. R. Urniežius
T125B361	1	Automatic Control Theory	6	64					x				Assoc. Prof. A. Knyš, Assoc. Prof. A. Dervinienė
T170B151	1	Fundamentals of Digital and Microprocessor Systems	6	80					x				Prof. Ž. Nakutis
T125B116	1	Image Processing and Recognition	6	64						x			Assoc. Prof. V. Raudonis
T125B360	1	Programmable Logical Controllers	6	80						x			Assoc. Prof. G. Dervinis
T125B117	1	Computational Intelligence Methods	6	64							x		Assoc. Prof. V. Raudonis
		Total of Credits:	**75**		**6**		**12**	**18**	**21**	**12**	**6**		
Major Field Subjects													
T125B149	1	Robot End Effectors 1	3	32					x				Assoc. Prof. R. Urniežius
T125B150	1	Control Systems and Programing of Robots	6	64						x			Assoc. Prof. R. Urniežius
T125B151	1	Modeling of Robotized Systems	6	80						x			Lect. G. Narvydas
T125B152	1	Mobile Robots	9	96							x		Lect. G. Narvydas
T125B153	1	Project of Robotic System	9	80							x		Assoc. Prof. R. Urniežius
		Total of Credits:	**33**						**3**	**12**	**18**		
Practice													
PR00B170	1	Professional Practice	15									x	Assoc. Prof. R. Urniežius
		Total of Credits:	**15**									**15**	
Final Degree Project													
T000B230	1	Final Degree Project	15									x	Assoc. Prof. A. Lipnickas
		Total of Credits:	**15**									**15**	
Optional Subjects (Amount in Credits)													
		Optional Subjects 2019	9							6	3		
Total of Credits													
Per Study Programme and per Semester			**240**		**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**	

General Electives

Code	**F**	**Course**	**Cr.**	**Contact hrs**	**Semester Recommended**				**Coordinating Lecturer**
					1 sem. 9 cr.	**3 sem. 6 cr.**	**4 sem. 6 cr.**	**5 sem. 6 cr.**	
Electives of Personality and Health Development 2018									
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 Philosophy 2018									
H120B111	1	Media Philosophy	6	64	x				Assoc. Prof. N. Čepulis
H120B031	1	Philosophy	6	64	x				Lect. A. Bingelis
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
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

Faculty implementing the programme

Faculty	Code
Faculty of Electrical and Electronics Engineering	03

Study programme committee

Study programme committee	Code
	AUT-KSPK

Programme coordinator

Position	Pedagogical title, research degree	Surname, name	Payroll No
Assoc. Prof.		BARANAUSKAS Virginijus	A578

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

2018			

Programme renewal date

2018		