

**KAUNAS UNIVERSITY OF TECHNOLOGY**  
**FACULTY OF MECHANICS AND MECHATRONICS**

[www.ktu.lt](http://www.ktu.lt)

**NUCLEAR ENERGY (BSc. Study program)**

**Contact person : A. Adomavicius**

**Duration 4 years**

**240 ECTS**

**Qualification: BSc in Energy**

**1 term**

<b>Studijų dalykas</b>	<b>National credits</b>	<b>ECTS</b>
1 Fundamentals of technologies (P175B301)	4	6
2 Engineering graphics (T210B303)	4	6
3 Professional communication and terminology (H592B103)	4	6
4 Mathematics (P130B001)	4	6
5 Sports (S273B001)	0	0
6 Free to choose 2010 (NL, IS)	4	6
<b>Total:</b>	<b>20</b>	<b>30</b>

**2 term**

<b>Studijų dalykas</b>	<b>National credits</b>	<b>ECTS</b>
1 Sports (S273B002)	0	0
2 Philosophy (H120B031)	4	6
3 Mathematics (P130B002)	4	6
4 Physics (P190B101)	4	6
5 Fundamentals of information technologies (P175B302)	2	3
6 Statics (P190B002)	2	3
7 Computer aided drawing (T210B301)	2	3
8 Fundamentals of law (S110B010)	2	3
<b>Total:</b>	<b>20</b>	<b>30</b>

**3 term**

<b>Subject</b>	<b>National credits</b>	<b>ECTS</b>
1 Applied physics (P001B207)	4	6
2 PPhysics (P230B202)	4	6
3 Chemistry (P401B401)	4	6
4 Kinematics and dynamics (P190B003)	4	6
5 Material mechanics (P190B504)	4	6
<b>Total:</b>	<b>20</b>	<b>30</b>

**4 term**

<b>Subject</b>	<b>National credits</b>	<b>ECTS</b>
1 Probability theory and statistics (P160B003)	4	6
2 Fundamentals of management of energy enterprises (S190B105)	2	3
3 Electrical circuits (T190B270)	4	6
4 Applied thermodynamics (T200B113)	4	6
5 Applied hydromechanics (T210B223)	2	3
6 Resistance of konstruktive elements (T210B501)	2	3
7 Material engineering (T450B102)	2	3

8	Užsienio kalbų alternatyvos (B1-B2 lygiai) 2010	0	0
<b>Total:</b>		<b>20</b>	<b>30</b>

#### 5 term

	<b>Studijų dalykas</b>	<b>National credits</b>	<b>ECTS</b>
1	Fundamentals of machines 1 (T210B403)	4	6
2	Applied electrotechnique (T190B373)	2	3
3	Electricity technologies in nuclear power plant (T140B101)	2	3
4	Thermohydronechanics (P240B100)	4	6
5	Thermodynamic for engineers(T200B126)	4	6
6	Foreign languages (B1-B2 2010)	0	0
7	Special subjects	4	6
<b>Total:</b>		<b>20</b>	<b>30</b>

#### 6 term

	<b>Subjects</b>	<b>National credits</b>	<b>ECTS</b>
1	Heat and mass transfer (T140B102)	4	6
2	Heating, ventillation and air conditioning (T200B111)	2	3
3	Regulation of technological processes (T125B006)	2	3
4	Protection of biosphere (T270B005)	2	3
5	Foreign languages (C1) 2010	4	6
6	Special subjects	6	9
<b>Total:</b>		<b>20</b>	<b>30</b>

#### 7 semestras

	<b>Studijų dalykas</b>	<b>National credits</b>	<b>ECTS</b>
1	Micro and macroeconomy (S180B302)	4	6
2	Project work (T160B115)	4	6
3	Free to choose 2010 (NL, IS)	4	6
4	Special subjects	8	12
<b>Total:</b>		<b>20</b>	<b>30</b>

#### 8 term

	<b>Studijų dalykas</b>	<b>National credits</b>	<b>ECTS</b>
1	Human Safety (T500B002)	2	3
2	Professional training (T000B180)	10	15
3	BSc thesis (T000B143)	8	12
<b>Total:</b>		<b>20</b>	<b>30</b>

#### Special subjects

	<b>Subject</b>	<b>National credits</b>	<b>ECTS</b>
<b><i>Nuclear power plants</i></b>			
1	Engineering systems of NPP (T160B103)	4	6
2	Nuclear fuel cycle (T160B104)	4	6
3	Nuclear and neutron physics (P220B001)	2	3
4	Nuclear reactors (T160B102)	2	3
5	Radiation measurements and radiation protection (T160B113)	2	3
6	Theory of nuclear reactors (T160B010)	4	6
<b><i>Nuclear energy engineering</i></b>			
1	Radioactive environmental pollution (T160B109)	2	3
2	Quality management (S189B410)	4	6
3	Heat engines (T455B100)	2	3
4	Economy planning (S184B001)	4	6
5	Installations of nuclear reactorsi (T160B116)	4	6
6	Energy systems (T140B106)	2	3