Western Caspian University
FACULTY OF INNOVATIVE ENGINEERING
050629 in Mechatronics and Robotics Engineering
EMPLOYEE TRAINING PLAN

Education Level - bachelor
Study Period - 4 years
Instruction Language - Azerbaijani, Russian, English

Code	I semester	
Code	Compulsory Subjects	ECTS
ÜF-B02.01	Business and academic communication in a foreign language -1	6
ÜF – B03	Business and academic communication in the Azerbaijani language	4
İF-BO1	Linear algebra and analytical geometry	4
İF-BO4	Physics	5
İF-B18	Computer graphic	5
İF-B20	Civil defense	3
	Total	27
Elective subjects in general subjects		
Code	Compulsory Subjects	ECTS
ÜFS-B04	**First block** 1. Philosophy 2. Introduction to multiculturalism 3. Sociology 4. The Constitution of the Republic of Azerbaijan and the bases of law 5. Logic 6. Ethics and aesthetics	3
	Total	3
	Per semester	**30**
II semestr		
Code	Compulsory Subjects	ECTS
ÜF-B01	History of Azerbaijan	5
ÜF-B02.02	Business and academic communication in a foreign language -2	6
İF-BO2	Mathematical analysis	8
İF-BO5	Fundamentals of mechatronics and robotics	6
	Total	25
Subjects determined by the higher education institution		
Code	Compulsory Subjects	ECTS
ATMF-BO1	**I block:** 1. Multimedia technologies 2.Mechatronics systems	5
	Total	5
	Per semester	**30**
III semester		
Code	Compulsory Subjects	ECTS
ÜF-B02.03	Business and academic communication in a foreign language -3	3
İF-BO3	Applied mathematics	4
İF-BO6	Theoretical mechanics	6
İF-BO7	Basics of programming	7
	Total	20

	Subjects determined by the higher education institution	
Code	Compulsory Subjects	ECTS
ATMF-BO2	1.*Expert systems* 2. *Inverse geometry and engineering graphics*	4
ATMF-BO6	1. *Basics of circuitry* 2. *Built-in microprocessors*	6
	Total	10
	Per semester	**30**
	IV semester	
Code	Compulsory Subjects	ECTS
İF-BO8	Theory of machines and mechanisms	6
İF-BO9	Data structure and algorithms	7
İF-B11	Design of mechatronics and robotics systems	8
	Total	21
	Subjects determined by the higher education institution	
Code	Compulsory Subjects	ECTS
ATMF-BO3	1.Web programming 2. Laser and its use	4
ATMF-BO5	1. Engineering mathematics 2. Systematic analysis	5
	Total	9
	Per semester	**30**
	V semester	
Code	Compulsory Subjects	ECTS
İF-B10	Database systems	7
İF-B12	Electronics	6
İF-B13	Control of robots	6
	Total	19
	Subjects determined by the higher education institution	
Code	Compulsory Subjects	ECTS
ATMF-BO7	1. Optical information systems 2.Engineering design systems	5
ATMF-BO8	1. Distributed cloud calculations 2. Corporate information systems	6
	Total	11
	Per semester	**30**
	VI semestr	
Code	Fənnin adı	ECTS
İF-B14	Modeling and simulation of dynamic systems	6
İF-B16	Processing of digital signals and images	7
İF-B17	Sensors and actuators	7
	Total	20
	Subjects determined by the higher education institution	
Code	Compulsory Subjects	ECTS
ATMF -BO9	1. Analytical processing of data 2. Basics of cryptography	5
ATMF-BO11	1. Materials and processes 2. Modern programming languages	5
	Total	10
	Per semester	**30**
	VII semester	
Code	Compulsory Subjects	ECTS
İF-B15	Automatic control theory	6
İF-B19	Flexible production systems	6

	Total	12

<table>
<tr><td colspan="3">Elective subjects in general subjects</td></tr>
<tr><td>Code</td><td>Compulsory Subjects</td><td>ECTS</td></tr>
<tr><td>ÜFS-B05</td><td>Second block
1. Information technology (by specialty)
2. Information management
3. Politology
4. Basics of entrepreneurship and introduction to business</td><td>3</td></tr>
<tr><td></td><td>Total</td><td>3</td></tr>
<tr><td colspan="3">Subjects determined by the higher education institution</td></tr>
<tr><td>ATMF-BO4</td><td>1. Means of communication
2. Internet technologies</td><td>5</td></tr>
<tr><td>ATMF-BO10</td><td>1. Decision making models
2. Digital electronics</td><td>5</td></tr>
<tr><td>ATMF-BO12</td><td>1. Robotics complexes
2. Industrial robots</td><td>5</td></tr>
<tr><td></td><td>Total</td><td>15</td></tr>
<tr><td colspan="2">Per semester</td><td>30</td></tr>
<tr><td colspan="3">VIII semester</td></tr>
<tr><td>Code</td><td>Compulsory Subjects</td><td>ECTS</td></tr>
<tr><td></td><td>Experience</td><td>21</td></tr>
<tr><td></td><td>Thesis</td><td>9</td></tr>
<tr><td colspan="2">Per semester</td><td>30</td></tr>
<tr><td colspan="2">Total</td><td>240</td></tr>
<tr><td colspan="3">Fall semester</td></tr>
<tr><td colspan="3">Classes start: September 15
Exam session: from December 29 to February 1
Holidays: February 2 to February 15</td></tr>
<tr><td colspan="3">Summer semester</td></tr>
<tr><td colspan="3">Classes start: February 16
Exam session: from June 1 to July 5
Vacation: duration is determined by the curriculum (6-10 weeks)</td></tr>
<tr><td colspan="3">Summer semester</td></tr>
<tr><td colspan="3">Classes start: July 16 to August 20
Exam session: August 21-27</td></tr>
</table>