

WESTERN CASPIAN UNIVERSITY

**School of High Technologies and Innovative Engineering
050628 Major in Mechanical Engineering
Programme**

Education Level – Bachelors

Study Period- 4 Years

Instruction Language – Azerbaijani, Russian and English

| I semester | | |
|---|--|-----------|
| Code | Compulsory Subjects | ECTS |
| ÜF-B02.01 | Business and academic communication in a foreign language -1 | 6 |
| ÜF – B05 | Business and academic communication in the Azerbaijani language | 4 |
| İPF-B01 | Linear algebra and analytical geometry | 4 |
| İPF-B05 | Physics | 8 |
| İPF-B07 | Inverse geometry and engineering | 5 |
| İPF-B24 | Civil Defense | 3 |
| Total | | 30 |
| Per Semester: | | 30 |
| II semester | | |
| Code | Compulsory Subjects | ECTS |
| ÜF-B01 | Azərbaycan History | 5 |
| ÜF – B02.02 | Business and academic communication in a foreign language -2 | 6 |
| İPF-B02 | Mathematical analysis | 8 |
| İPF-B06 | Introduction to the specialty | 4 |
| Total | | 23 |
| Elective subjects in general | | |
| Code | Compulsory Subjects | ECTS |
| ÜFS-B06 | 1. Ethics and aesthetics 2. Logic 3. Introduction to multiculturalism 4. Sociology 5. Philosophy 6. Constitution of the Republic of Azerbaijan and bases of law | 3 |
| Total | | 3 |
| Subjects determined by the higher education institution | | |
| Code | Compulsory Subjects | ECTS |
| İPFS-BO1 | 1. Multimedia technologies 2. Mechatronics systems | 4 |
| Total | | 5 |
| Per Semester: | | 30 |
| III semester | | |
| Code | Compulsory Subjects | ECTS |
| ÜF – B02.03 | Business and academic communication in a foreign language -3 | 3 |
| İPF-B03 | Applied mathematics | 4 |
| İPF-B04 | Chemistry | 5 |

| | | |
|--|---|-----------|
| İPF-B09 | Theoretical mechanics | 6 |
| İPF-B13 | Computer graphic | 3 |
| Total | | 21 |
| Subjects determined by the higher education institution | | |
| Code | Compulsory Subjects | ECTS |
| İPFS-BO2 | 1. Expert systems 2. Descriptive geometry and engineering graphics | 5 |
| İPFS-BO3 | 1. Introduction to robotics | 4 |
| Total | | 9 |
| Per Semester: | | 30 |
| IV semester | | |
| Code | Compulsory Subjects | ECTS |
| İPF-B11 | Theory of machines and mechanisms | 7 |
| İPF-B14 | Basics of electrical engineering and electronics | 4 |
| İPF-B21 | Metrology and certification | 5 |
| İPF-B22 | Flow mechanics | 5 |
| Total | | 21 |
| Subjects determined by the higher education institution | | |
| Code | Compulsory Subjects | ECTS |
| İPFS-BO4 | 1. Web programming 2. Laser and its use | 5 |
| İPFS-BO5 | 1. Communication methods 2. Internet technologies | 4 |
| Total | | 9 |
| Per Semester: | | 30 |
| V semester | | |
| Code | Compulsory Subjects | ECTS |
| İPF-B10 | The resistance of materials | 6 |
| İPF-B16 | Basics of automation | 4 |
| İPF-B18 | Basics of programming | 5 |
| İPF-B23 | Engineer economy | 4 |
| Total | | 19 |
| Subjects determined by the higher education institution | | |
| Code | Compulsory Subjects | ECTS |
| İPFS-B06 | 1. Engineering mathematics 2. Systematic analysis | 6 |
| İPFS-B07 | 1. Basics of circuitry 2. Built-in microprocessors | 5 |
| Total | | 11 |
| Per Semester: | | 30 |
| VI semester | | |
| Code | Compulsory Subjects | ECTS |
| İPF-B12 | Materials technology | 4 |
| İPF-B17 | Machine design | 7 |
| İPF-B19 | Thermodynamics | 4 |
| Total | | 15 |
| Subjects determined by the higher education institution | | |
| Code | Compulsory Subjects | ECTS |
| İPFS-B08 | 1. Distributed cloud computing 2. Corporate information systems | 5 |
| İPFS-B09 | 1. Analytical data processing 2. Basics of cryptography | 5 |
| İPFS-B11 | 1. Materials and processes | 5 |

| | | |
|---|---|------------|
| | 2. Modern programming languages | |
| | Total | 15 |
| | Per Semester: | 30 |
| VII semester | | |
| Code | Compulsory Subjects | ECTS |
| İPF-B08 | Materials science | 4 |
| İPF-B15 | Machine production technology | 7 |
| İPF-B20 | Life safety | 4 |
| | Total | 15 |
| Elective subjects in general | | |
| Code | Compulsory Subjects | ECTS |
| ÜFS-B07 | Information technologies | 3 |
| | Total | 3 |
| Subjects determined by the higher education institution | | |
| İPFS-B10 | 1. Decision making models 2. Digital electronics | 6 |
| İPFS-B12 | 1. Robotics complexes 2. Industrial robots | 6 |
| | Total | 12 |
| | Per Semester: | 30 |
| VIII semester | | |
| Code | Compulsory Subjects | ECTS |
| | Practise | 21 |
| | Thesis | 9 |
| | Per Semester: | 30 |
| | Total | 240 |
| FALL SEMESTER: | | |
| Lessons Start: September 15 Exam Period: From December 29 To February 1 Holidays: February 2 To February 15 | | |
| SUMMER SEMESTER: | | |
| Lessons Start: September 15 Exam Period: From December 29 To February 1 Holidays: February 2 To February 15 | | |
| SUMMRT SEMESTER: | | |
| Lessons Start: July 16 To August 20 Exam Period: August 21-27 | | |