KHAZAR UNIVERSITY

Electrical and electronics engineering B.S. Program

1st Year

| CODE | <u>Fall Semester</u> | <u>KU</u> | ECTS |
|----------|-----------------------|-----------|------|
| AZLL 101 | Azerbaijan Language | 3 | 6 |
| MATH 101 | Calculus_I | 3 | 6 |
| PHSC 150 | Physics | 3 | 6 |
| ENGL 101 | English Foundations_I | 4 | 8 |
| | Social Sciences** | 3 | 6 |
| | | | |
| | Credit | 16 | 32 |

| CODE | Spring Semester | <u>KU</u> | ECTS |
|----------|------------------------|-----------|------|
| CHEM 111 | Chemistry | 3 | 6 |
| MATH 102 | Calculus_II | 3 | 6 |
| PHSC 220 | Applied Physics | 3 | 6 |
| ENGL 102 | English Foundation _II | 4 | 8 |
| AZC 202 | Azerbaijan Culture | 2 | 4 |
| AZH 150 | Azerbaijan History | 3 | 6 |
| | Credit | 18 | 36 |

2nd Year

| CODE | <u>Fall Semester</u> | <u>KU</u> | ECTS |
|----------|--|-----------|------|
| ETR 220 | Fundamentals of electrical engineering | 4 | 8 |
| ENGL 216 | ESP Electronics Engineering | 3 | 6 |
| CMS 115 | Computer Application in Engineering | 3 | 6 |
| ENGR 205 | Technical mechanics | 3 | 6 |
| MATH 235 | Applied Linear Algebra | 3 | 6 |
| | Elective (major)*** | 3 | 6 |
| | Credit | 19 | 38 |

| CODE | Spring Semester | <u>KU</u> | ECTS | |
|---------|--|-----------|------|--|
| ETR250 | Materials of electrical and electronic equipment | 3 | 6 | |
| | Elective (major)*** | 4 | 8 | |
| | Social Sciences** | 3 | 6 | |
| ETR 232 | Analog and digital electronics | 3 | 6 | |
| ETR 270 | Electrical Measurements and Methods | 3 | 6 | |
| | | | | |
| | Credit | 16 | 32 | |

3rd Year

| CODE | Fall Semester | <u>KU</u> | ECTS |
|---------|-----------------------------------|-----------|------|
| ETR 393 | Basic of Circuitry | 3 | 6 |
| MED 315 | Life Science | 3 | 6 |
| CIV 215 | Engineering Drawing | 3 | 6 |
| ETR330 | Electrical and electronic devices | 3 | 6 |
| | Humanity* | 3 | 6 |
| | Credit | 15 | 30 |

| ETR 356 | of electricity | 3 | 6 |
|---------|---------------------|----|----|
| | Humanity* | 3 | 6 |
| | Elective (major)*** | 3 | 6 |
| | | | |
| | Credit | 12 | 24 |
| | | | |
| | | | |

Fundamental of Computer Programming

| CODE | Summer Semester | <u>KU</u> | ECTS |
|--------|------------------|-----------|------|
| ETR362 | Summer Intership | 6 | 12 |
| | Credit | 6 | 12 |

4th Year

| CODE | <u>Fall Semester</u> | <u>KU</u> | ECTS |
|---------|------------------------|-----------|------|
| ETR 452 | Electric machines | 4 | 8 |
| | Elective (major)*** | 3 | 6 |
| ETR 462 | Power electronics | 3 | 6 |
| ETR 460 | Micropressor technique | 3 | 6 |
| ETR 480 | Electrotechnology | 3 | 6 |
| | Credit | 16 | 32 |

| CODE | Spring Semester | <u>KU</u> | ECTS |
|---------|--|-----------|------|
| | Elective (major)*** | 4 | 8 |
| ETR 468 | Electrical drives | 3 | 6 |
| ETR 470 | Industrial automation and programmable logic controllers | 3 | 6 |
| | | | |
| | | | |
| | Credit | 10 | 20 |

Total Credit for Graduation

128 256

| | * Humanity | 6 | | ***Major Electives | KU | ECTS |
|----------|-------------------------------------|---|----------|-------------------------------------|-----|------|
| FNLG 201 | Foreign language 1 | 3 | ETR 211 | Semiconductor Devices | 3 | 6 |
| HIST 110 | History of World Civilizations | 3 | EENG 250 | Electrical Engineering | 3 | 6 |
| FNLG 202 | Foreign language 2 | 3 | EENG 245 | Basic Electronics | 4 | 8 |
| PHIL 110 | Introduction to philosophy | 3 | ETR 312 | Fundamentals of Microwaves | 3 | 6 |
| LAW 220 | Family Law | 3 | CHE 490 | Renewable Energy | 3 | 6 |
| LAW 102 | Law Enforcement Systems | 3 | ETR 390 | Control system | 3 | 6 |
| | | | ETR 482 | Electronic Systems and Technologies | 4 | 8 |
| | ** Social Sciences | 6 | ETR 461 | Robotics | 4 | 8 |
| MGT 310 | Management and Organization | 3 | ETR 490 | Optical Communication Engineering | 3 | 6 |
| LAW 220 | Family Law | 3 | ETR 416 | Power Convertion | 3 | 6 |
| ECON 101 | Introduction to Economics | 3 | | | | |
| LAW 102 | Law Enforcement Systems | 3 | | | KU | ECTS |
| | | | | University Requirement English | 11 | 22 |
| | | | | University Requirement Azeri | 8 | 16 |
| | | | | Humanity | 6 | 12 |
| | Science and Technology | 9 | | Science and Technology | 9 | 18 |
| MATH 101 | Calculus 1 | 3 | | Social Sciences | 6 | 12 |
| CMS 115 | Computer Application in Engineering | 3 | | Major Courses | 88 | 176 |
| MED 315 | Life Sciences | 3 | | | | |
| | | | | Total | 128 | 256 |