

**2019-2020 ACADEMIC YEAR COURSE CATALOG**

**Faculty Engineering: Department of Mechatronics Engineering**

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| **SEMESTER 2** | | |
| **Code** | **Course Name** | **ECTS** |
| ATA102 | Ataturk’s Principles and History of Revolution II | 2 |
| ENG104 | English II | 2 |
| MATH102 | Calculus II | 7 |
| MCT100 | Linear Algebra | 4 |
| MCT142 | Advanced Programming | 7 |
| PHY102 | Physics II | 6 |
| TUR 102 | Turkish Language and Culture -II | 2 |

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| **SEMESTER 1** | | |
| **Code** | **Course Name** | **ECTS** |
| ATA101 | History of Turkish Republic and Ataturk-I | 2 |
| CHE103 | Chemistry | 4 |
| ENG103 | English I | 2 |
| MATH101 | Calculus I | 7 |
| MCT111 | Introduction to Mechatronics and Ethics | 4 |
| MCT141 | Introduction to Programming | 3 |
| PHY101 | Physics I | 6 |
| TUR 101 | Turkish Language and Culture -I | 2 |

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| **SEMESTER 3** | | |
| **Code** | **Course Name** | **ECTS** |
| MCT201 | Differential Equations | 6 |
| MCT211 | Computer Aided Technical Drawing | 4 |
| MCT213 | Technical Language Skills I | 2 |
| MCT221 | Statics and Strength of Materials | 6 |
| MCT223 | Engineering Materials | 4 |
| MCT225 | Measurement Techniques | 3 |
| MCT231 | Circuit Analysis | 5 |

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| **SEMESTER 4** | | |
| **Code** | **Course Name** | **ECTS** |
| MCT200 | Occupational Health and Safety | 3 |
| MCT202 | Statistics and Probability | 5 |
| MCT214 | Technical Language Skills II | 2 |
| MCT220 | Manufacturing Technologies | 5 |
| MCT222 | Engineering Dynamics | 5 |
| MCT230 | Electromechanical Systems | 5 |
| MCT232 | Electronic Circuits | 5 |

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| **SEMESTER 5** | | |
| **Code** | **Course Name** | **ECTS** |
| MCT301 | Mathematical Methods in Engineering I | 5 |
| MCT303 | Numerical Analysis | 5 |
| MCT305 | Entrepreneurship and Engineering Ethics | 3 |
| MCT313 | Introduction to Microcontrollers | 4 |
| MCT321 | Mechanical System Design | 5 |
| MCT323 | Fluid Mechanics | 4 |
| MCT341 | System Dynamics and Modelling | 4 |

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| **SEMESTER 6** | | | | |
| **Code** | | **Course Name** | **ECTS** | |
| \*\*\* | | Elective Department Course I | 4 | |
| MCT302 | | Mathematical Methods in Engineering II | 5 | |
| MCT310 | | Pneumatics and Hydraulics | 4 | |
| MCT314 | | Sensing and Data Collection | 4 | |
| MCT320 | | Fundamentals of Thermodynamics | 5 | |
| MCT330 | | Electrical Machines | 4 | |
| MCT342 | | Control Systems | 4 | |
| **ELECTIVE DEPARTMENT COURSES** | | | | |
| MCT350 | | Programmable Logic Controllers | 4 | |
| MCT352 | | Collaborative Robotic Systems | 4 | |
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| **SEMESTER 7** | | | | | |
| **Code** | **Course Name** | | | **ECTS** | |
| \*\*\* | Elective Department Course II | | | 4 | |
| \*\*\* | Elective Department Course III | | | 4 | |
| \*\*\* | Elective Faculty Course I | | | 4 | |
| MCT401 | Interdisciplinary Design Project | | | 4 | |
| MCT411 | Mechatronics System Design | | | 7 | |
| MCT413 | Robot Technique | | | 7 | |
| **ELECTIVE DEPARTMENT COURSES** | | | | | |
| MCT451 | Industrial Applications of Manufacturing Technologies | | | 4 | |
| MCT453 | Object Oriented Programming | | | 4 | |
| MCT455 | Finite Element Analysis | | | 4 | |
| MCT457 | Machine Learning | | | 4 | |
| MCT459 | Power Electronics | | | 4 | |
| MCT461 | Digital Image Processing | | | 4 | |
| MCT463 | Robotic Gripper Systems | | | 4 | |
| MCT465 | Biomechatronics Systems | | | 4 | |
| **ELECTIVE FACULTY COURSES** | | | | | |
| MCT463 | Robotic Gripper Systems | | | 4 | |
| MME357 | Nanomaterials | | | 4 | |
| IND475 | Economics of Technology | | | 4 | |
| CVL453 | Geographical Information Systems | | | 4 | |
| EEE463 | Electric Power Generation | | | 4 | |
| MEC461 | Solar Energy | | | 4 | |
| CMP363 | Mobile Software Development | | | 4 | |
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| **SEMESTER 8** | | |
| **Code** | **Course Name** | **ECTS** |
| \*\*\* | Elective Department Course IV | 4 |
| \*\*\* | Elective Faculty Course II | 4 |
| \*\*\* | Elective University Course | 3 |
| MCT400 | Diploma Thesis / Project | 9 |
| MCT402 | Academic English | 2 |
| MCT404 | Summer Training | 3 |
| MCT410 | Computer Aided Manufacturing | 5 |
| **ELECTIVE DEPARTMENT COURSES** | | |
| MCT450 | Robotic Welding Technologies | 4 |
| MCT452 | Embedded System Design | 4 |
| MCT454 | Industrial Applications of Power Electronics | 4 |
| MCT456 | Sensor Technique | 4 |
| MCT458 | Biomechatronics Systems | 4 |
| MCT460 | Superconductor Technologies | 4 |
| MCT462 | Finite Element Analysis | 4 |
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| MCT464 | Digital Image Processing | 4 |
| **ELECTIVE FACULTY COURSES** | | |
| MCT460 | Superconductor Technologies | 4 |
| MME350 | Composite Materials | 4 |
| IND494 | Sustainability in Engineering | 4 |
| CVL484 | Project Planning and Management | 4 |
| EEE460 | Renewable Energy Production Technologies | 4 |
| MEC492 | Surface Treatment | 4 |
| CMP364 | Data Mining | 4 |

**Faculty of Economics,Administrative and Social Sciences Department of International Relations**

**Semester 1**

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| **Code** | **Course Name** | **ECTS** |
| IRS101 | History of International Relations I | 5 |
| IRS103 | Effective Communication and Presentation Technics | 5 |
| IRS105 | English for International Relations I | 4 |
| ITF113 | Introduction to Economics | 6 |
| SOC109 | Introduction to Sociology | 6 |
| ATA101 | History of Turkish Republic and Ataturk-I | 2 |
| TUR101 | Turkish Language and Culture -I | 2 |

**Semester 2**

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| **Code** | **Course Name** | **ECTS** |
| IRS102 | History of International Relations II | 7 |
| IRS104 | Introduction to International Relations | 8 |
| IRS106 | English for International Relations II | 4 |
| IRS108 | Introduction to Political Science | 7 |
| ATA102 | Ataturk’s Principles and History of Revolution II | 2 |
| TUR102 | Turkish Language and Culture -II | 2 |

**Semester 3**

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| **Code** | **Course Name** | **ECTS** |
| IRS201 | International Relations Theory I | 6 |
| IRS203 | History of Political Thoughts | 5 |
| IRS205 | Turkish Political Regime and System | 5 |
| IRS207 | Regional Studies: Latin America | 5 |
| IRS209 | Introduction to Law | 5 |
|  | Elective Foreign Language | 4 |

**Semester 4**

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| **Code** | **Course Name** | **ECTS** |
| IRS202 | International Relations Theory II | 6 |
| IRS204 | Ethnic and Religious Minorities | 5 |
| IRS206 | Turkish Political Life | 5 |
| IRS208 | Comperative Political Regimes | 5 |
| IRS210 | Regional Studies: America | 5 |
|  | Elective Foreign Language | 4 |

**Semester 5**

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| **Code** | **Course Name** | **ECTS** |
| IRS301 | International Law I | 7 |
| IRS303 | Turkish Foreign Policy I | 7 |
|  | Elective Foreign Language | 4 |
|  | Departmental Elective Course | 4 |
|  | Departmental Elective Course | 4 |
|  | Faculty Elective Course | 4 |

**Semester 6**

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| **Code** | **Course Name** | **ECTS** |
| IRS302 | International Law II | 6 |
| IRS304 | Turkish Foreign Policy II | 6 |
| IRS306 | Regional Studies: Far East | 6 |
|  | Elective Foreign Language | 4 |
|  | Departmental Elective Course | 4 |
|  | Faculty Elective Course | 4 |

**Semester 7**

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| **Code** | **Course Name** | **ECTS** |
| IRS401 | Regional Studies: Eastern Europe and Russia | 7 |
| IRS403 | Global/Regional Case Studies | 8 |
|  | Elective Academic Foreign Language | 4 |
|  | Departmental Elective Course | 4 |
|  | Departmental Elective Course | 4 |
|  | University Elective Course | 3 |

**Semester 8**

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| **Code** | **Course Name** | **ECTS** |
| IRS402 | Regional Studies: Middle East and North Africa | 6 |
| IRS404 | Research Methodology and Reporting | 6 |
| IRS406 | History and Latest Developments of European Union | 6 |
|  | Elective Academic Foreign Language | 4 |
|  | Departmental Elective Course | 4 |
|  | Departmental Elective Course | 4 |

**ELECTIVE COURSES**

**Semester 3**

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|  | **FOREIGN LANGUAGE** |  |
| **Code** | **Course Name** | **ECTS** |
| CHN201 | Chinese I | 4 |
| RUS201 | Russian I | 4 |
| ARP201 | Arabic I | 4 |

**Semester 4**

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|  | **FOREIGN LANGUAGE** |  |
| **Code** | **Course Name** | **ECTS** |
| CHN202 | Chinese II | 4 |
| RUS202 | Russian II | 4 |
| ARP202 | Arabic II | 4 |
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**Semester 5**

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|  | **ELECTIVE FOREIGN LANGUAGE** |  |
| **Code** | **Course Name** | **ECTS** |
| CHN301 | Chinese III | 4 |
| RUS301 | Russian III | 4 |
| ARP301 | Arabic III | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| IRS351 | Political Structure of the United States of America | 4 |
| IRS353 | Global Democracy | 4 |
| IRS355 | Culture and Arts | 4 |
| IRS357 | Political Sociology | 4 |
| IRS359 | Artificial Intelligence | 4 |
| IRS361 | Urbanization Politics | 4 |
| IRS363 | Integration Theory and International Organizations | 4 |
|  | **ELECTIVE FACULTY COURSES** |  |
| ITF365 | Current Economic Issues | 4 |
| ITF367 | Turkish Economy | 4 |

**Semester 6**

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| **Code** | **Course Name** | **ECTS** |
|  | **ELECTIVE FOREIGN LANGUAGE** |  |
| CHN302 | Chinese IV | 4 |
| RUS302 | Russian IV | 4 |
| ARP302 | Arabic IV | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| IRS352 | Human Rights | 4 |
| IRS354 | Daily Political Discussions | 4 |
| IRS356 | Arts and Science | 4 |
| IRS358 | New Media Systems in 21th Century | 4 |
| IRS360 | Local and Global Immigration Issue - Analysis | 4 |
| IRS362 | Turkish-German Relations | 4 |
| IRS364 | Environmental Politics From Local to Global | 4 |
|  | **ELECTIVE FACULTY COURSES** |  |
| SOC452 | Sociology of Migration | 4 |
| PSK112 | Social  Psychology | 4 |

**Semester 7**

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| **Code** | **Course Name** | **ECTS** |
|  | **ELECTIVE FOREIGN LANGUAGE** |  |
| IRS453 | Academic Chinese I | 4 |
| IRS455 | Academic Russian I | 4 |
| IRS457 | Academic Arabic I | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| IRS461 | Political Developments since 1945 and Gobalisation | 4 |
| IRS463 | International Political Economy | 4 |
| IRS465 | Internet Journalism | 4 |
| IRS467 | Turkey-EU Relations | 4 |
| IRS469 | Social Relations and Pluralism | 4 |
| IRS471 | Theory of Nationalism and Micro Nationalism | 4 |
| IRS473 | Global Politics | 4 |

**Semester 8**

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| **Code** | **Course Name** | **ECTS** |
|  | **ELECTIVE FOREIGN LANGUAGE** |  |
| IRS454 | Academic Chinese II | 4 |
| IRS456 | Academic Russian II | 4 |
| IRS458 | Academic Arabic II | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| IRS462 | Foreign Policy Analysis | 4 |
| IRS464 | Civil Society and Effects on Global Politics | 4 |
| IRS466 | Energy and Security Problems | 4 |
| IRS468 | Turkish-Greek Relations | 4 |
| IRS470 | Turkish-American Relations | 4 |
| IRS472 | Civil-Military Relations | 4 |
| IRS474 | Intercultural Communication | 4 |

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|  | **ELECTIVE UNIVERSITY COURSES** |  |
| UNI036 | Ethics and Human Relations | 3 |
| UNI039 | Introduction to Programming | 3 |
| UNI040 | Building, Plants and Environment Relations | 3 |
| UNI041 | World Dynamics and Decision Systems | 3 |
| UNI042 | Personal Development | 3 |
| UNI043 | Coding | 3 |
| UNI044 | Institutional Identity and Visuality in Spaces | 3 |
| UNI045 | Mythology | 3 |
| UNI046 | Modeling | 3 |
| UNI047 | Music Culture and Applications | 3 |
| UNI048 | Nanoscience and Nanotechnology’s Influence on Socioeconomic Systems | 3 |
| UNI049 | Ottoman Cities | 3 |
| UNI050 | Ottoman Turkish | 3 |
| UNI051 | Writing, Conducting and Reporting Projects | 3 |
| UNI052 | Chromatics | 3 |
| UNI053 | Risk Management and Growth Strategies | 3 |
| UNI054 | Healthy Nutrition | 3 |
| UNI055 | Martial Arts and Archery Applications | 3 |
| UNI056 | Sustainable Environment Education | 3 |
| UNI057 | Introduction to Sustainable Design | 3 |
| UNI058 | Design and Technology | 3 |
| UNI059 | Technology and Innovation Management | 3 |
| UNI060 | Gender Equality | 3 |
| UNI061 | Project Development and Innovation | 3 |
| BRA001 | Introduction to Cyber Security | 3 |
| BRA002 | Strategic Management | 3 |
| BRA003 | Digital Engineering | 3 |

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| **\*\*\*P.S.: The courses of 7th and 8th semesters will be activated in the Academic Year of 2020-2021. And only the elective courses that determined at the beginning of each semester are opened.** |

**Faculty of Architecture and Fine Arts: Department of Visual Communication Design**

**Semester 3**

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| **Code** | **Course Name** | **ECTS** |
| VCD | Web Design 1 | 5 |

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| **Semester** | **4** |  |
| **Code** | **Course Name** | **ECTS** |
| VCD 206 | Web Design 2 | 4 |
| VCD 232 | Desktop Publishing | 4 |

**Semester 5**

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| **Code** | **Course Name** | **ECTS** |
| VCD 305 | Studio 1 | 7 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| VCD 351 | 3D Design Applications I | 4 |
| VCD 357 | Digital Illustration 1 | 4 |
| VCD 361 | Computer Aided Design (CAD) | 4 |
| VCD 371 | Multimedia Design | 4 |

**Semester 6**

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| **Code** | | **Course Name** | **ECTS** |
| VCD 306 | | Studio 2 | 6 |
| VCD 304 | | 3D Animation | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** | |  |
| VCD 352 | | **3D Design Applications II** | 4 |
| VCD 358 | | **Digital Illustration II** | 4 |

**Semester 7**

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| **Code** | **Course Name** | **ECTS** |
| VCD 405 | 3D Visualizational Animation | 4 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| VCD 451 | Packacing Design I | 4 |
| VCD 461 | Portfolio and Presentation Techniques | 4 |

**Semester 8**

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| **Code** | **Course Name** | **ECTS** |
| VCD 417 | 3D Character Design | 5 |
|  | **DEPARTMENTAL ELECTIVE COURSES** |  |
| VCD 452 | Packacing Design II | 4 |
| VCD 458 | E-Commerce Applications | 4 |