| GRADUATE LEVEL COURSES - THE GRADUATE SCHOOL OF NATURAL AND APPLIES SCIENCES, DOKUZ EYLÜL UNIVERSITY (Last Update: October 22, 2024) | | | | | | |
|---|---|---|---|---|---|---|
| DEPARTMENT | CODE | NAME OF THE COURSE | TYPE OF COURSE | TOTAL CREDIT | ECTS CREDIT | SEMESTER |
| Computer Engineering | CSE 6004 | Advanced Computer Architecture | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 6006 | Advanced Constraint Logic Programming | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5019 | Advanced Distributed Databases | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6013 | Advanced Evolutionary Computation | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5015 | Advanced Information Systems | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | CSE 5087 | Advanced Logic Programming | ELECTIVE | 3 | 7 | 1 |
| Computer Engineering | CSE 5047 | Advanced Network Technologies | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5031 | Advanced Software Engineering | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5048 | Advanced Software Engineering Development Team | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5058 | Agent Technologies | ELECTIVE | 3 | 7 | 2 |
| Computer Engineering | CSE 5083 | Analysis of Algorithms | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | MAT 5101 | Applied Mathematics | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | CSE 5032 | Artificial Intelligence | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5005 | Bioinformatics Algorithms | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | CSE 5008 | Computer Networks Security | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 6005 | Constraint Programming | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6011 | Cryptosystems and Cryptographic Protocols | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5006 | Data Mining and Knowledge Discovery | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5076 | Digital Audio Processing | ELECTIVE | 3 | 7 | 2 |
| Computer Engineering | CSE 5012 | Distributed Computing Systems | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5003 | E-Commerce | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | CSE 5002 | Evolutionary Computation | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5088 | Foundations and Applications of Social Network Analysis | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5094 | Foundations of Internet of Everything | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5075 | Fundamentals of Quantum Computing | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6008 | Genetic Programming | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5004 | Graph Theory and Algorithms | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5070 | High Performance Computing | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5001 | Human-Computer Interaction | ELECTIVE | 3 | 7 | 1 |
| Computer Engineering | CSE 5092 | Internet of Things | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5051 | Introduction to Microprocessors | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5014 | Knowledge Based Systems | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5007 | Machine Learning and Reasoning | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | MAT 5151 | Methods of Applied Mathematics | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | CSE 5090 | Mobile Cloud Computing | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5066 | Multimedia Information Retrieval | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 6015 | Natural Language Processing | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5053 | Network Design and Implementation | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5013 | Neural Networks | ELECTIVE | 3 | 9 | 1 |
| Computer Engineering | MAT 5102 | Numerical and Approximate Methods | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5043 | Object Oriented Analysis and Design | ELECTIVE | 3 | 8 | 1 |

| Computer Engineering | CSE 5055 | Object Relational Database Management Systems | ELECTIVE | 3 | 8 | 1 |
|---|---|---|---|---|---|---|
| Computer Engineering | CSE 5022 | Parallel Information Processing | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5016 | Pattern Recognition | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5089 | Performance Analysis of Computer Networks | ELECTIVE | 3 | 7 | 1 |
| Computer Engineering | FBE 6668 | Philosophy of Science and Ethics | ELECTIVE | 3 | 5 | 2 |
| Computer Engineering | CSE 5021 | Principles of Database Design | ELECTIVE | 3 | 7 | 1 |
| Computer Engineering | CSE 5074 | Principles of Natural Language Processing | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5011 | Programming Languages:Advanced Concepts | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6007 | Reconfigurable Computing | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5020 | Requirement Engineering and Development Teams | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | FBE 5557 | Scientific Research Techniques and Publication Ethics | ELECTIVE | 3 | 5 | 1 |
| Computer Engineering | CSE 5065 | Security and Privacy Engineering | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6001 | Software Quality Engineering | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5010 | Strategic Information System Development | ELECTIVE | 3 | 9 | 2 |
| Computer Engineering | CSE 5091 | Temporal Information Systems | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5061 | Text Based Information Retrieval | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5093 | Text Mining | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5041 | Theory of Computer Science | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 6009 | Transform Based Image Processing | ELECTIVE | 3 | 8 | 1 |
| Computer Engineering | CSE 5024 | Web Engineering | ELECTIVE | 3 | 8 | 2 |
| Computer Engineering | CSE 5059 | Wireless Sensor and Actor Networks | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | EEE 5069 | Adaptive Filter Theory | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | BMT 5034 | Analysis Methods I | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | EEE 5029 | Artificial Neural Networks | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | BMT 5035 | Biodesign in Biomedical Engineering | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | BMT 5001 | Bioelectromagnetism | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | BMT 5020 | Bioethics | ELECTIVE | 2 | 4 | 2 |
| Biomedical Technologies | BMT 5037 | Bioheat Transfer | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | BMT 5022 | Biomaterials: Cell-surface Interactions | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | BMT 5013 | Biomedical Computing | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | BMT 5015 | Biomedical Electronics | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | BMT 5003 | Biomedical Image Processing | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | EEE 5088 | Biomedical Instrumentation | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | BMT 5017 | Biomedical Optics | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | BMT 5005 | Biomedical Sensors | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | EEE 5076 | Biomedical Signal Processing | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | BMT 5028 | Biometric Systems | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | BYT 5018 | Bionanotechnology | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | STA 5069 | Bio-Statistics | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | BMT 5030 | Cardiovascular Engineering | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | BYM 0546 | Cell and Tissue Engineering | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | STA 6015 | Data Mining Techniques in Statistic | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | CSC 5038 | Fuzzy Clustering and Classification Techniques | ELECTIVE | 3 | 8 | 2 |

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|---|---|---|---|---|---|---|
| Biomedical Technologies | CSC 5053 | Fuzzy Data Analysis | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | EEE 5105 | HRV Analysis | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | EEE 5503 | Linear Systems Theory I | ELECTIVE | 3 | 9 | 1 |
| Biomedical Technologies | EEE 5106 | Magnetic Resonance Imaging | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | MAT 5141 | Mathematical Methods | ELECTIVE | 3 | 9 | 1 |
| Biomedical Technologies | BMT 5019 | Medical Devices | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | MME 5028 | Nanotechnology | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | EEE 5030 | Neural Networks for Signal Processing | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | BIP 6018 | Neurobiology and Cognition | ELECTIVE | 2 | 4 | 2 |
| Biomedical Technologies | BMT 5024 | Pathophysiology | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | EEE 5095 | Physiology For Engineers | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | MME 5052 | Polymeric Biomaterials | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | BMT 5036 | Signals and Systems for Biomedical Technologies | ELECTIVE | 3 | 7 | 2 |
| Biomedical Technologies | STA 6016 | Soft Computing Technologies | ELECTIVE | 3 | 8 | 2 |
| Biomedical Technologies | EEE 5073 | Statistical Pattern Recognition | ELECTIVE | 3 | 8 | 1 |
| Biomedical Technologies | STA 5021 | Statistical Software in Data Analysis | ELECTIVE | 3 | 7 | 1 |
| Biomedical Technologies | BIP 6007 | Systems Theory of the Brain I | ELECTIVE | 3 | 6 | 1 |
| Biomedical Technologies | BIP 6002 | Systems Theory of the Brain II | ELECTIVE | 3 | 5 | 2 |
| Biomedical Technologies | BMT 5007 | Wavelets in Biomedical Signal Processing | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | ENV 5021 | Advances in Bioenvironmental Engineering | ELECTIVE | 2 | 7 | 1 |
| Biotechnology | BYT 5007 | Biodegradation and Biotransformation of Organic Substances | ELECTIVE | 2 | 7 | 1 |
| Biotechnology | BYT 6018 | Biofuel Production | ELECTIVE | 2 | 7 | 2 |
| Biotechnology | KIM 6047 | Bioinorganic Chemistry | ELECTIVE | 3 | 7 | 1 |
| Biotechnology | ENV 5060 | Computer Assisted Design and Analysis of Experiments | ELECTIVE | 3 | 6 | 2 |
| Biotechnology | BYT 6022 | Epithelial Mesenchymal Transition, Research and Applications | ELECTIVE | 3 | 8 | 2 |
| Biotechnology | BYT 6016 | Functions and Biotechnology of Plant Secondary Metabolites | ELECTIVE | 3 | 8 | 2 |
| Biotechnology | ENV 5015 | Fundamentals of Environmental Biotechnology - I | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | ENV 5016 | Fundamentals of Environmental Biotechnology - II | ELECTIVE | 3 | 9 | 2 |
| Biotechnology | BYT 6011 | Marine Toxins | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | BYT 6019 | Nanochemistry in Science and Technology | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | BYT 6012 | Nanomaterials and Biotechnological Applications | ELECTIVE | 3 | 8 | 2 |
| Biotechnology | ENV 5024 | Novel Bioprocesses for Waste Treatment | ELECTIVE | 2 | 4 | 2 |
| Biotechnology | BYT 6015 | Plant Stress and Biotechnology | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | BYT 6013 | Recombinant Techniques in Biotechnology | ELECTIVE | 3 | 8 | 1 |
| Biotechnology | BYT 6002 | Sekonder Metabolitlerin Üretimi | ELECTIVE | 3 | 9 | 2 |
| Biotechnology | BYT 6014 | Stem Cells and Applications | ELECTIVE | 3 | 8 | 2 |
| Environmental Engineering | ENV 5063 | Advanced Oxidation Processes and Application Areas | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5036 | Advanced Solid Wastes Technologies | ELECTIVE | 2 | 6 | 2 |
| Environmental Engineering | ENV 6001 | Advanced Treatment Technology | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5008 | Air Pollution Control Techniques | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5026 | Anaerobic Treatment | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5011 | Biological Removal of Nitrogen and Phosphorus | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5044 | Contaminant Fate and Transport in the Subsurface | ELECTIVE | 3 | 6 | 2 |

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|---|---|---|---|---|---|---|
| Environmental Engineering | ENV 5038 | Design of Sludge Handling and Disposal Systems | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5040 | Designing and Modelling of Anaerobic Processes | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5020 | Environmental Data Management | ELECTIVE | 4 | 9 | 2 |
| Environmental Engineering | ENV 5028 | Environmental Modelling | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5032 | Industrial Air Pollution Control | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5017 | Industrial Wastewater Treatment - I | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5018 | Industrial Wastewater Treatment - II | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5005 | Infrastructure Systems | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 6009 | Innovative Solid Waste Technologies | ELECTIVE | 3 | 8 | 1 |
| Environmental Engineering | ENV 6004 | Management of Hazardous Wastes | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5022 | Mathematical Modelling of Biological Waste Treatment Systems | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5013 | Measurement of Air Pollutants | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5061 | Model Supported Inorganic Water Treatment | ELECTIVE | 3 | 3 | 1 |
| Environmental Engineering | ENV 5034 | Natural Treatment Systems | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5056 | Numerical Modeling of Flow and Contaminant Transport in Rivers | ELECTIVE | 3 | 4 | 2 |
| Environmental Engineering | ENV 5033 | Numerical Modeling of Ground Water | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5030 | Operation of Activated Sludge Process | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 6006 | Physical and Chemical Treatment | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5057 | Physical Aspects of Environmental Engineering | ELECTIVE | 3 | 7 | 1 |
| Environmental Engineering | ENV 5023 | Pollution Prevention Techniques | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5001 | Principles of Environmental Technology | ELECTIVE | 4 | 8 | 1 |
| Environmental Engineering | ENV 6011 | Sludge Management | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5042 | Soil Contamination and Remediation | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5062 | Solid Waste Management | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5059 | Statistical Design and Evaluation of Experiments | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5055 | Surface Water Quality Modeling | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5025 | Unit Operations for Waste Gas Control | ELECTIVE | 2 | 4 | 1 |
| Environmental Engineering | ENV 5031 | Wastewater Reclamation and Reuse | ELECTIVE | 3 | 6 | 1 |
| Environmental Engineering | ENV 5002 | Water Chemistry | ELECTIVE | 3.5 | 9 | 2 |
| Environmental Engineering | ENV 5064 | Water Desalination | ELECTIVE | 3 | 6 | 2 |
| Environmental Engineering | ENV 5012 | Water Quality Management | ELECTIVE | 2 | 4 | 2 |
| Environmental Engineering | ENV 5003 | Water Treatment Technology - I | ELECTIVE | 3.5 | 7 | 1 |
| Environmental Engineering | ENV 5004 | Water Treatment Technology - II | ELECTIVE | 3.5 | 9 | 2 |
| Environmental Earth Sciences | EES 5045 | Biohyrometallurgy and Acid Mine Drainage | ELECTIVE | 2 | 7 | 1 |
| Environmental Earth Sciences | EES 5049 | Data Analysis and Statistical Inference | ELECTIVE | 3 | 8 | 1 |
| Environmental Earth Sciences | EES 5037 | Environmental Science and Technology | ELECTIVE | 3 | 8 | 1 |
| Environmental Earth Sciences | EES 5053 | Groundwater Pollution and Control | ELECTIVE | 3 | 7 | 1 |
| Environmental Earth Sciences | EES 5035 | Mining and Environment | ELECTIVE | 3 | 8 | 1 |
| Environmental Earth Sciences | EES 5050 | Soil Pollution and Control | ELECTIVE | 3 | 7 | 2 |
| Environmental Earth Sciences | EES 5044 | Solid Waste Control Technologies | ELECTIVE | 2 | 7 | 2 |
| Environmental Earth Sciences | EES 5048 | Utilization of Mining Tailings | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5028 | Advanced Computer Programming | ELECTIVE | 2 | 9 | 2 |
| Geographical Information Systems | EEE 5066 | Advanced Digital Signal Processing | ELECTIVE | 3 | 8 | 2 |

| Geographical Information Systems | GIS 5046 | Advanced GIS: Desktop Mapping | ELECTIVE | 3 | 7 | 2 |
|---|---|---|---|---|---|---|
| Geographical Information Systems | GIS 6020 | Advanced Raster Modelling | ELECTIVE | 3 | 8 | 2 |
| Geographical Information Systems | GIS 5038 | Advanced Topics in Remote Sensing | ELECTIVE | 2 | 8 | 2 |
| Geographical Information Systems | PLN 5093 | Applied Mathematics for Planners | ELECTIVE | 3 | 7 | 1 |
| Geographical Information Systems | GIS 5034 | CAD/GIS Integration | ELECTIVE | 2.5 | 7 | 2 |
| Geographical Information Systems | GIS 5012 | Computer Graphics and Animation | ELECTIVE | 2 | 8 | 2 |
| Geographical Information Systems | GIS 5019 | Computer Simulations | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 5027 | Crisis Management in GIS | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 5040 | Database Management Systems for GIS | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5005 | Digital Cartography | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 6002 | Digital Terrain Modelling | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5018 | Environmental and Cultural Inventories via GIS | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5020 | Environmental Inventories and Information Systems | ELECTIVE | 2 | 9 | 2 |
| Geographical Information Systems | GIS 5017 | Environmental Scenarios and Modelling in the GIS Context | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 5009 | Fundamentals of Algorithms and Data Structures | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 5043 | Fundamentals of Geographical Information Systems (GIS) | ELECTIVE | 3 | 8 | 1 |
| Geographical Information Systems | GIS 5031 | Geographical Information Systems (GIS) in Water Resources Research | ELECTIVE | 3.5 | 8 | 1 |
| Geographical Information Systems | GIS 6024 | Geo-Ontology Engineering | ELECTIVE | 3 | 8 | 2 |
| Geographical Information Systems | GIS 5008 | Geospatial Statistics | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5042 | GIS (Geographical Information Systems) Applications in Mining | ELECTIVE | 2 | 6 | 2 |
| Geographical Information Systems | GIS 6018 | GIS Algorithms and Data Structure | ELECTIVE | 3 | 8 | 2 |
| Geographical Information Systems | GIS 6008 | GIS Application Development | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5025 | GIS in Earth Sciences | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 5036 | GIS in Environmental Engineering | ELECTIVE | 2 | 9 | 2 |
| Geographical Information Systems | GIS 5029 | GIS in Public Management | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 5015 | GIS in Urban Planning | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 5032 | GIS Project Design | ELECTIVE | 2 | 8 | 2 |
| Geographical Information Systems | GIS 6022 | GIS Seminar | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5010 | GIS Software Applications | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 6001 | GIS Theories, Models and Issues | ELECTIVE | 3 | 8 | 1 |
| Geographical Information Systems | GIS 6005 | Global Navigation and Satellite Systems (GNSS) | ELECTIVE | 3 | 8 | 1 |
| Geographical Information Systems | GIS 5003 | Image Processing | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 5004 | Information Systems Analysis and Design | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 6016 | Landscape Modelling with GIS | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5014 | Marine Bio-optics and Remote Sensing of Ocean Color | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 6006 | Modelling Applied GIS | ELECTIVE | 1.5 | 8 | 2 |
| Geographical Information Systems | GIS 5044 | Multi-criteria Decision Analysis in GIS | ELECTIVE | 3 | 7 | 2 |
| Geographical Information Systems | GIS 5021 | Network and Utility Information Systems | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 5035 | Photogrammetry in GIS | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 5037 | Principles of Remote Sensing | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 6013 | Radar Remote Sensing | ELECTIVE | 2 | 8 | 1 |
| Geographical Information Systems | GIS 6012 | Remote Sensing Seminar | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 5026 | Risk Assesement in GIS | ELECTIVE | 2 | 7 | 2 |

| Geographical Information Systems | GIS 5013 | Satellite Oceanography | ELECTIVE | 2 | 7 | 1 |
|---|---|---|---|---|---|---|
| Geographical Information Systems | GIS 6011 | Semantic GIS | ELECTIVE | 3 | 7 | 1 |
| Geographical Information Systems | GIS 6004 | Spatial Analysis and Modelling | ELECTIVE | 2.5 | 8 | 2 |
| Geographical Information Systems | GIS 6003 | Spatial Data Management | ELECTIVE | 3 | 8 | 1 |
| Geographical Information Systems | GIS 6026 | Spatial Statistics in GIS | ELECTIVE | 2.5 | 8 | 2 |
| Geographical Information Systems | GIS 6010 | Spatial Temporal Data Modelling | ELECTIVE | 3 | 8 | 2 |
| Geographical Information Systems | GIS 5023 | The Use of GIS in Water Resources Management | ELECTIVE | 2 | 7 | 1 |
| Geographical Information Systems | GIS 6007 | Transportation and Spatial Information | ELECTIVE | 3 | 8 | 1 |
| Geographical Information Systems | GIS 5016 | Urban Infra Structure | ELECTIVE | 2 | 7 | 2 |
| Geographical Information Systems | GIS 6014 | Web Based GIS Technology and Mapping | ELECTIVE | 3 | 8 | 2 |
| Earthquake Management | DEP 5018 | Active Faults | ELECTIVE | 3 | 6 | 2 |
| Natural Building Stones and Gemstones | NBG 5019 | Colored Stone Grading System and Essentials | ELECTIVE | 2 | 5 | 1 |
| Natural Building Stones and Gemstones | NBG 5012 | Cutting Tools and Abrasives Technology | ELECTIVE | 2 | 5 | 2 |
| Natural Building Stones and Gemstones | NBG 5020 | Diamond Grading System and Essentials | ELECTIVE | 2 | 5 | 2 |
| Natural Building Stones and Gemstones | NBG 5010 | Identify Natural, Synthetic and Imitation Gemstones | ELECTIVE | 2 | 5 | 2 |
| Natural Building Stones and Gemstones | NBG 5025 | Industrial Minerals and Rocks | ELECTIVE | 3 | 6 | 1 |
| Natural Building Stones and Gemstones | NBG 5005 | Marble Quarry Machinery and Production Techniques | ELECTIVE | 2 | 5 | 1 |
| Electrical and Electronics Engineering | EEE 5115 | Advanced Computer Networks - I | ELECTIVE | 3 | 7 | 1 |
| Electrical and Electronics Engineering | EEE 6003 | Advanced Electromagnetic Theory | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5123 | Advanced Static Power Conversion | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5114 | Advanced Topics in Digital Image Processing | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5121 | Analog Filter Design | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5004 | Analog Integrated Circuit Design | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5071 | Analysis and Synthesis of Nonlinear Circuits | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5026 | Antenna Theory | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5113 | Antennas and Propagation for Wireless Systems | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5017 | Applied Optics | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5117 | Campus Network Design | ELECTIVE | 3 | 7 | 1 |
| Electrical and Electronics Engineering | EEE 6006 | Chaos and Fractals | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5027 | Communication Systems Design | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5035 | Communication Theory | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5091 | Computational Methods in Electrical Engineering | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5011 | Computer Aided Design of Electronic Circuits | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5041 | Computer Algorithms - I | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5034 | Computer Vision | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5125 | Computer-Aided Power System Analysis | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5089 | Data Converters | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5036 | Digital Communication Systems | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5033 | Digital Image Processing | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5037 | Digital Video Processing | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5001 | Electric Motor Drives | ELECTIVE | 3 | 7 | 1 |
| Electrical and Electronics Engineering | EEE 5127 | Electric Power System Planning | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5032 | Electrical Aspects of Wind Energy Conversion Systems | ELECTIVE | 3 | 8 | 2 |

| Electrical and Electronics Engineering | EEE 5101 | Electrical Power Systems Quality | ELECTIVE | 3 | 8 | 1 |
|---|---|---|---|---|---|---|
| Electrical and Electronics Engineering | EEE 5014 | Electronic Instrumentation | ELECTIVE | 3 | 7 | 2 |
| Electrical and Electronics Engineering | EEE 5072 | Fuzzy Systems | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5065 | Generalized Machine Theory | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5021 | High Frequency Techniques in Electromagnetics | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5075 | Information Theory and Coding | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5082 | Integrated Sensors | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5110 | Integration of Distributed Power Generation in Power Systems | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5020 | Internetwork Design Principles | ELECTIVE | 3 | 7 | 2 |
| Electrical and Electronics Engineering | EEE 5090 | Linear and Nonlinear Programming | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5502 | Linear Systems Theory II | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5047 | Microcontroller Architecture and Applications | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5092 | Microwave Tehcnology | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5111 | Microwave Theory | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5103 | Modern Spectral Estimation | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5133 | Neural Computing | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5102 | Nonlinear Systems Theory | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5022 | Numerical Methods in Electromagnetics | ELECTIVE | 3 | 7 | 2 |
| Electrical and Electronics Engineering | EEE 5043 | Object Oriented System Modelling | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5104 | Optimal Control | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5083 | Phase Locked Loop Theory and Applications | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5112 | Photovoltaic Power Systems | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5018 | Principles of Lasers | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5086 | Principles of VLSI Design | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5129 | Random Variables and Stochastic Processes | ELECTIVE | 3 | 9 | 1 |
| Electrical and Electronics Engineering | EEE 5058 | Real-Time Digital Signal Procesing | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5108 | RF Circuit Design | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5064 | Special Topics in Power Electronics | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5119 | Special Topics in Unsupervised Adaptive Filtering | ELECTIVE | 3 | 7 | 1 |
| Electrical and Electronics Engineering | EEE 5084 | Statistical Detection Theory in Signal Processing | ELECTIVE | 3 | 8 | 2 |
| Electrical and Electronics Engineering | EEE 5087 | Statistical Estimation Theory in Signal Processing | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5049 | Switched Mode Power Converters | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5109 | Systems Identification | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5055 | Time Frequency Signal Analysis | ELECTIVE | 3 | 8 | 1 |
| Electrical and Electronics Engineering | EEE 5131 | Transform Theory and Its Applications | ELECTIVE | 3 | 9 | 1 |
| Electrical and Electronics Engineering | EEE 5067 | Wavelet Theory and Multiresolution Signal Analysis | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5022 | Advance Engineering Management | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5029 | Analysis of Automated Manufacturing Systems | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5059 | Applied Metaheuristics | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5035 | Business Management and Organization | ELECTIVE | 3 | 7 | 1 |
| Industrial Engineering | ENM 5042 | Business Process Analyses and Modeling | ELECTIVE | 3 | 6 | 2 |
| Industrial Engineering | IND 5056 | Computational Intelligence in Design and Manufacturing | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5058 | Computational Logistics | ELECTIVE | 3 | 8 | 2 |

| Industrial Engineering | IND 5024 | Constraint Programming | ELECTIVE | 3 | 8 | 2 |
|---|---|---|---|---|---|---|
| Industrial Engineering | ENM 5006 | Customer Relation and Services Management | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5048 | Decision Models for Circular Economy | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5017 | Dynamic and Stochastic Programming | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5052 | Enterprise Modeling and Integration | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5026 | Facilities Planning and Design | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5005 | Financial Management and Control | ELECTIVE | 3 | 7 | 1 |
| Industrial Engineering | IND 5012 | Forecasting and Time Series Analysis for Management | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5054 | Fundamentals of Optimization | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5012 | Industrial Applications of Simulation | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5007 | Information Systems Analysis and Design | ELECTIVE | 3 | 7 | 1 |
| Industrial Engineering | IND 5021 | Innovation Management | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5004 | Inventory Systems Analysis | ELECTIVE | 3 | 9 | 2 |
| Industrial Engineering | IND 5031 | Lean Production Systems | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5046 | Location Theory | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5020 | Logistics Management | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5016 | Maintenance, Replacement and Reliability | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5033 | Management Control Systems and Budgeting Process | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5028 | Managerial Decision Modeling with Spreadsheets | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5026 | Methods Design & Work Measurement | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5047 | Modeling and Analysis of Generalized Assembly Lines | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5053 | Modelling and Analysis of Manufacturing Systems Using Petri Nets | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5049 | Modelling and Optimization of Energy Systems | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5031 | Modern  Management Techniques in Engineering | ELECTIVE | 3 | 7 | 1 |
| Industrial Engineering | IND 5018 | Multiobjective and Multicriteria Programming | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5057 | Operations Planning and Scheduling | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5051 | Optimization Software | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5035 | Performance Analysis of Manufacturing Systems | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5006 | Planning and Design of Service Systems | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5023 | Process Improvement & Lean Manufacturing | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5008 | Production Management Systems | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5040 | Project Management | ELECTIVE | 3 | 7 | 2 |
| Industrial Engineering | ENM 5013 | Quantative Business Analysis I | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5014 | Quantative Business Analysis II | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5009 | Quantitative Methods for Decision Making | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5032 | Response Surface Methodology and Applications in Engineering | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5055 | Revenue Management And Pricing | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5063 | Risk Assessment and Management | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5034 | Simulation of Manufacturing Systems | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | ENM 5038 | Statistical Techniques for Engineering Management | ELECTIVE | 3 | 8 | 2 |
| Industrial Engineering | IND 5065 | Sustainable Engineering | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5027 | Systems Simulation | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | ENM 5018 | Technology and Innovation Management | ELECTIVE | 3 | 8 | 2 |

| Industrial Engineering | ENM 5011 | Total Quality Management | ELECTIVE | 3 | 8 | 1 |
|---|---|---|---|---|---|---|
| Industrial Engineering | IND 5025 | Total Quality Techniques | ELECTIVE | 3 | 8 | 1 |
| Industrial Engineering | IND 5030 | Transportation and Supply Chain Systems | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5174 | Additive Manufacturing in Construction | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5108 | Admixtures for Concrete | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5165 | Advanced Behavioral Analysis of Reinforced Concrete | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5153 | Advanced Concrete Technology | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5155 | Advanced Soil Mechanics - I | MANDATORY | 3 | 8 | 1 |
| Civil Engineering | CIE 5042 | Advanced Soil Mechanics - II | MANDATORY | 3 | 8 | 2 |
| Civil Engineering | CIE 5089 | Advanced Tools in Network Analysis | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5055 | Airport Design - I | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5056 | Airport Design - II | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5110 | Bituminious Materials | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5028 | Coastal Structures | ELECTIVE | 3.5 | 8 | 2 |
| Civil Engineering | CIE 5111 | Construction Materials for Coastal Structures | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5131 | Contaminant Transport in Groundwater | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5143 | Dam Hydraulics | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5141 | Designing with Geosynthetics in Geotechnical Engineering | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5106 | Dimensional Stability of Concrete | ELECTIVE | 3 | 9 | 2 |
| Civil Engineering | CIE 5154 | Durability of Concrete | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5064 | Dynamics of Bases and Foundations | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5004 | Dynamics Stability | ELECTIVE | 2 | 6 | 2 |
| Civil Engineering | CIE 5005 | Elastic Stability | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5168 | Energy Geotechnics | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5002 | Engineering Analysis | ELECTIVE | 3 | 9 | 2 |
| Civil Engineering | CIE 5084 | Engineering Experimentation of Construction Materials | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5117 | Engineering Reliability and Risk in Water Resources | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5006 | Finite Elements | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5152 | Flow Through Porous Media | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5166 | Ground Improvement | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5051 | Highway Materials | MANDATORY | 3 | 8 | 1 |
| Civil Engineering | CIE 5136 | Hydraulic Physical Models | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5123 | Hydrology of Floods | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5139 | Integrated River Basin Management | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5043 | Measurement of Soil Properties | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5092 | Mix Design Methods for Asphalt Concrete | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5118 | Multivariate Techniques in Hydrology | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5138 | Nonparametric Inference in Hydrology | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5178 | Pavement Design | ELECTIVE | 3 | 9 | 2 |
| Civil Engineering | CIE 5015 | Project Management | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5170 | Seismic Hazard Assessment | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5008 | Soil Behavior | ELECTIVE | 3 | 9 | 2 |
| Civil Engineering | CIE 5001 | Soil Dynamics | ELECTIVE | 3 | 8 | 1 |

| Civil Engineering | CIE 5081 | Soil Structure Interaction | ELECTIVE | 3 | 8 | 1 |
|---|---|---|---|---|---|---|
| Civil Engineering | CIE 5040 | Special Topics in Geotechnical Eng. | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5026 | The Nature and Behavior of Timber | ELECTIVE | 3 | 7 | 2 |
| Civil Engineering | CIE 5003 | Theory of Elasticity | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5010 | Theory of Prestressed Concrete | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 6004 | Traffic Originated Road-Site Soil Pollution | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5094 | Transit Capacity | ELECTIVE | 3 | 8 | 2 |
| Civil Engineering | CIE 5059 | Transportation Logistics | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5087 | Transportation Planing | ELECTIVE | 3 | 7 | 1 |
| Civil Engineering | CIE 5167 | Transportation Systems | ELECTIVE | 3 | 8 | 1 |
| Civil Engineering | CIE 5146 | Waste Geotechnics | ELECTIVE | 3 | 7 | 2 |
| Occupational Health and Safety | ISG 5034 | Catastrophic Failures in Engineering | ELECTIVE | 3 | 8 | 2 |
| Occupational Health and Safety | ISG 5013 | Ergonomics | ELECTIVE | 3 | 7 | 1 |
| Occupational Health and Safety | ISG 5045 | Industrial Dust | ELECTIVE | 3 | 8 | 1 |
| Occupational Health and Safety | ISG 5043 | Occupational Health and Safety in Construction Works | ELECTIVE | 3 | 7 | 1 |
| Occupational Health and Safety | ISG 5037 | Professional Ethics | ELECTIVE | 3 | 7 | 1 |
| Occupational Health and Safety | ISG 5019 | Risk Factors and Risk Management in Wastewater Treatment Plants | ELECTIVE | 3 | 6 | 1 |
| Occupational Health and Safety | ISG 5015 | Risk Management for Hazardous Chemicals | ELECTIVE | 3 | 6 | 1 |
| Occupational Health and Safety | ISG 5032 | Safety, Health and Environmental Protection | ELECTIVE | 3 | 8 | 2 |
| Occupational Health and Safety | ISG 5030 | Surveillance of Work Environment | ELECTIVE | 3 | 7 | 2 |
| Occupational Health and Safety | KIM 5103 | Toxic Effects of  Industrial Chemicals and Regarding Safety Rules | ELECTIVE | 3 | 8 | 1 |
| Occupational Health and Safety | ISG 5010 | Workplace Safety in Minerals Industry | ELECTIVE | 2 | 6 | 2 |
| Geophysical Engineering | GPE 5031 | Application of Nonlinear Regression Techniques | MANDATORY | 3 | 8 | 1 |
| Geophysical Engineering | GPE 5037 | Deformation Analysis on Geophysics | ELECTIVE | 3 | 6 | 1 |
| Geophysical Engineering | GPE 5036 | Geophysical Applications of Artificial Neural Network | ELECTIVE | 3 | 7 | 2 |
| Geophysical Engineering | GPE 5041 | Modelling of Magnetotelluric Data | ELECTIVE | 3 | 6 | 1 |
| Geophysical Engineering | GPE 5015 | Plate Tectonics and Geophysical Implications | ELECTIVE | 2 | 5 | 1 |
| Geophysical Engineering | GPE 5035 | Ray Tracing Seismic Modeling Methods | ELECTIVE | 3 | 7 | 1 |
| Geophysical Engineering | GPE 5030 | Seismic Interpretation | ELECTIVE | 3 | 7 | 2 |
| Geological Engineering | GEE 5019 | Advanced Engineering Geology | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5024 | Advanced Methods of Structural Analysis | ELECTIVE | 3 | 8 | 2 |
| Geological Engineering | GEE 5003 | Advanced Structural Geology | ELECTIVE | 3 | 8 | 1 |
| Geological Engineering | GEE 5094 | Applied Rock Mechanics | ELECTIVE | 3 | 8 | 2 |
| Geological Engineering | GEE 5115 | Biostratigraphy | ELECTIVE | 3 | 8 | 1 |
| Geological Engineering | GEE 5032 | Borates and Sodium Carbonates | ELECTIVE | 3 | 6 | 2 |
| Geological Engineering | EES 5015 | Environmental Geology | ELECTIVE | 3 | 8 | 1 |
| Geological Engineering | GEE 5052 | EqulibriumThermodynamics in Geologycal Systems | ELECTIVE | 3 | 7 | 2 |
| Geological Engineering | GEE 5015 | Evaporites | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5067 | Geohazards | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5044 | Geological Construction Materials | ELECTIVE | 3 | 7 | 2 |
| Geological Engineering | GEE 5084 | İleri Hidrojeoloji | ELECTIVE | 3 | 8 | 2 |
| Geological Engineering | GEE 5011 | Mineral Equilibria and Solutions | ELECTIVE | 3 | 8 | 1 |
| Geological Engineering | GEE 5021 | Petrography of Sedimentary and Diagenetic Rocks | ELECTIVE | 3 | 8 | 1 |

| Geological Engineering | GEE 5110 | Planktonic Foraminifera | ELECTIVE | 3 | 8 | 2 |
|---|---|---|---|---|---|---|
| Geological Engineering | GEE 5031 | Plate Tectonics and Sediment Basins | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5055 | Radioactive Minerals | ELECTIVE | 2 | 5 | 1 |
| Geological Engineering | GEE 5001 | Sedimentary Basin Analysis | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5092 | Site Investigations | ELECTIVE | 3 | 7 | 2 |
| Geological Engineering | GEE 5083 | Terrain Evoluation | ELECTIVE | 3 | 7 | 1 |
| Geological Engineering | GEE 5060 | Trace Elements in Minerals | ELECTIVE | 3 | 7 | 2 |
| Geological Engineering | GEE 5046 | Volcanology | ELECTIVE | 3 | 9 | 2 |
| Geothermal Energy | GTE 5013 | Materials Selection for Geothermal Applications | ELECTIVE | 3 | 8 | 1 |
| Geothermal Energy | GTE 5018 | Statistical Data Analysis | ELECTIVE | 3 | 5 | 2 |
| Geothermal Energy | MAT 5006 | Theory of Partial Differential Equations | ELECTIVE | 3 | 7 | 2 |
| Geothermal Energy | GTE 5014 | Urban Design in Geothermal Fields | ELECTIVE | 3 | 8 | 2 |
| Logistics Engineering | LOG 5028 | Business Dynamics for Logistics Systems | ELECTIVE | 3 | 6 | 2 |
| Logistics Engineering | LOG 5024 | International Logistics | ELECTIVE | 3 | 6 | 2 |
| Logistics Engineering | LOG 5029 | Logistics Systems | ELECTIVE | 3 | 6 | 1 |
| Logistics Engineering | LOG 5010 | Operations Research in Supply Chains | ELECTIVE | 3 | 8 | 2 |
| Logistics Engineering | DLU 7025 | Ship Agency and Brokering | ELECTIVE | 3 | 6 | 1 |
| Logistics Engineering | LOG 5006 | Supply Chain Management | MANDATORY | 3 | 6 | 2 |
| Logistics Engineering | LOG 5012 | Transportation Flow Models | ELECTIVE | 3 | 8 | 2 |
| Logistics Engineering | LOG 5027 | Transportation Systems | ELECTIVE | 3 | 6 | 1 |
| Logistics Engineering | LOG 5025 | Urban Network Analysis | ELECTIVE | 3 | 4 | 1 |
| Mining Engineering | MIN 5026 | Advanced Rock Mechanics | ELECTIVE | 2 | 6 | 2 |
| Mining Engineering | MIN 5053 | Advenced Mining Finance and Mine Management | ELECTIVE | 2 | 6 | 1 |
| Mining Engineering | MIN 5076 | Aglomerasyon | ELECTIVE | 2 | 5 | 2 |
| Mining Engineering | MIN 5023 | Analysis Methods and Lab. Practice | ELECTIVE | 3 | 6 | 1 |
| Mining Engineering | MIN 5088 | Automatic Control and Instrumentation in Mineral Processing | ELECTIVE | 2 | 5 | 2 |
| Mining Engineering | MIN 5064 | Computer Aided Mine Design | ELECTIVE | 2 | 6 | 2 |
| Mining Engineering | MIN 5084 | Design and Operation of  Mine Waste Dumps | ELECTIVE | 2 | 6 | 2 |
| Mining Engineering | MIN 5057 | Drilling and Blasting in Mining | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5027 | Map Preparation and Evaluation in Mines | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5039 | Marble and Natural Stones Production Techniques | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5058 | Mine Planning | ELECTIVE | 2 | 6 | 2 |
| Mining Engineering | MIN 5037 | Mine Ventilation Planning | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5068 | Mineral Particle Systems | ELECTIVE | 2 | 5 | 2 |
| Mining Engineering | MIN 5060 | Mining Geostatistics | ELECTIVE | 2 | 5 | 2 |
| Mining Engineering | MIN 5045 | Novel Technologies in Mineral Processing | ELECTIVE | 3 | 6 | 1 |
| Mining Engineering | MIN 5033 | Open - Pit Mining Equipment | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5074 | Physical Separation Methods | ELECTIVE | 2 | 6 | 2 |
| Mining Engineering | MIN 5059 | Principles and Applications of Industrial Classification | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5025 | Project Preparation Techniques in Mines | ELECTIVE | 2 | 6 | 1 |
| Mining Engineering | MIN 5055 | Protection of the Surface Mining Environment | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5013 | Slurry Transportation and Tailings Disposal | ELECTIVE | 2 | 5 | 1 |
| Mining Engineering | MIN 5010 | Tailings Beneficiation in Mineral Processing | ELECTIVE | 2 | 5 | 2 |

| Mining Engineering | MIN 5062 | Tunnelling and Underground Construction | ELECTIVE | 2 | 5 | 2 |
|---|---|---|---|---|---|---|
| Mechanical Engineering | MEE 5070 | Actuators and Sensors in Mechanical Systems | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5017 | Advanced Automatic Control | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5023 | Advanced Dynamics | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5051 | Advanced Fluid Mechanics | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5056 | Advanced Solar Engineering | ELECTIVE | 3 | 7 | 2 |
| Mechanical Engineering | MEE 5037 | Advanced Strength of Materials | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5113 | Analysis of Vibration Signals | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5054 | Boundary Layer Theory | ELECTIVE | 3 | 7 | 2 |
| Mechanical Engineering | MEE 5086 | Chemical Thermodynamics | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5071 | Cogeneration | ELECTIVE | 3 | 7 | 1 |
| Mechanical Engineering | MEE 5063 | Combustion Fundamentals | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5073 | Compact Heat Exchangers | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5101 | Composite Materials | ELECTIVE | 3 | 7 | 1 |
| Mechanical Engineering | MEE 5074 | Computational Fluid Dynamics | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5112 | Computer Aided Analysis of Mechanical Systems | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5115 | Computer Aided Mathematics for Engineers | MANDATORY | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5049 | Computer-Aided Design | MANDATORY | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5032 | Convective Heat Transfer | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5107 | Dynamics of Mechanical Systems | ELECTIVE | 3 | 9 | 1 |
| Mechanical Engineering | MEE 5062 | Energy Management | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5076 | Energy Methods in Vibrations | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5102 | Fatigue | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5038 | Finite Element Methods | MANDATORY | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5103 | Fotoelastisite | ELECTIVE | 3 | 7 | 1 |
| Mechanical Engineering | MEE 5043 | Foundations of Solid Mechanics | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5110 | Fracture and Failure Mechanics of Composite Materials | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5089 | Fuel Cell Technology | ELECTIVE | 3 | 9 | 1 |
| Mechanical Engineering | MEE 5090 | Heat Conduction | ELECTIVE | 3 | 9 | 2 |
| Mechanical Engineering | MEE 5106 | Heat, Mass and Momentum Transfer | ELECTIVE | 3 | 9 | 2 |
| Mechanical Engineering | MEE 6024 | Impact on Composite Structures | ELECTIVE | 3 | 7 | 2 |
| Mechanical Engineering | MEE 5041 | Intermediate Dynamics | ELECTIVE | 3 | 7 | 1 |
| Mechanical Engineering | MEE 5067 | Linear Vibration Analysis | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5079 | Machine Foundations | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5085 | Machinery Acoustics | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5078 | Micro and Nanoscale Energy Transport | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5024 | Non-Linear Control | ELECTIVE | 3 | 9 | 2 |
| Mechanical Engineering | MEE 5026 | Non-Linear Vibration | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 6009 | Optimal Control | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5057 | Power Plant Technology | ELECTIVE | 3 | 7 | 1 |
| Mechanical Engineering | MEE 5061 | Process Control in Power Plants | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5025 | Radiative Heat Transfer | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5020 | Random Vibrations | ELECTIVE | 3 | 9 | 2 |

| Mechanical Engineering | MEE 6022 | Theory of Composite Plates and Shells | ELECTIVE | 3 | 8 | 2 |
|---|---|---|---|---|---|---|
| Mechanical Engineering | MEE 5008 | Theory of Elastic Stability | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5084 | Thermal Management of Electronic Packaging | ELECTIVE | 3 | 8 | 2 |
| Mechanical Engineering | MEE 5087 | Thermophysical Properties | ELECTIVE | 3 | 8 | 1 |
| Mechanical Engineering | MEE 5018 | Wave Propagation in Solids | ELECTIVE | 3 | 9 | 2 |
| Mechatronics Engineering | MEC 5021 | Automation Systems - Actuators | ELECTIVE | 3 | 6 | 1 |
| Mechatronics Engineering | MEC 5029 | Computer Aided Design and Analysis | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5028 | Dynamic Analysis of Robot Manipulators | ELECTIVE | 3 | 9 | 2 |
| Mechatronics Engineering | MEC 5031 | Embedded System Architecture | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5017 | Fuzzy Logic Computing and Control | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5006 | Machine Vision in Mechatronics | ELECTIVE | 3 | 7 | 2 |
| Mechatronics Engineering | MEC 5019 | Mechatronic Applications on Sustainable Energy Systems I | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5026 | Mechatronic Applications on Sustainable Energy Systems II | ELECTIVE | 3 | 8 | 2 |
| Mechatronics Engineering | MEC 5009 | Neural Network Applications in Mechatronic Systems | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5016 | Nonlinear and Sliding Mode Control | ELECTIVE | 3 | 8 | 2 |
| Mechatronics Engineering | MEC 5010 | Optimum Design Techniques in Mechatronical Systems | ELECTIVE | 3 | 8 | 2 |
| Mechatronics Engineering | MEC 5015 | Sensors and Interfacing Techniques | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5011 | Signal Processing and Analysis | ELECTIVE | 3 | 8 | 1 |
| Mechatronics Engineering | MEC 5033 | Smart Sensors and Communication Protocols in Mechatronics | ELECTIVE | 3 | 8 | 1 |
| Metalurgy and Material Engineering | MME 5026 | Advanced Characterization and Modification Techniques | ELECTIVE | 3 | 9 | 2 |
| Metalurgy and Material Engineering | MME 5002 | Advanced Tribology | ELECTIVE | 3 | 8 | 2 |
| Metalurgy and Material Engineering | MME 5059 | Aluminium  Technologies | ELECTIVE | 3 | 8 | 1 |
| Metalurgy and Material Engineering | MME 5053 | Carbon Nanomaterials | ELECTIVE | 3 | 7 | 1 |
| Metalurgy and Material Engineering | MME 5014 | Electronic Ceramics | ELECTIVE | 3 | 8 | 2 |
| Metalurgy and Material Engineering | MME 5049 | Environment-Sensitive Cracking | ELECTIVE | 3 | 7 | 1 |
| Metalurgy and Material Engineering | MME 6006 | Failure Analysis | ELECTIVE | 3 | 8 | 2 |
| Metalurgy and Material Engineering | MME 5025 | High Temperature Corrosion | ELECTIVE | 3 | 8 | 1 |
| Metalurgy and Material Engineering | MME 5056 | Nanocomposites | ELECTIVE | 3 | 7 | 2 |
| Metalurgy and Material Engineering | NNE 5032 | Photonic Crystals | ELECTIVE | 3 | 8 | 2 |
| Metalurgy and Material Engineering | MME 5057 | Polymeric Nanocomposites | ELECTIVE | 3 | 7 | 1 |
| Metalurgy and Material Engineering | MME 5064 | Production of Metastable Materials | ELECTIVE | 3 | 7 | 2 |
| Metalurgy and Material Engineering | NNE 5027 | Purification Processes | ELECTIVE | 3 | 8 | 1 |
| Metalurgy and Material Engineering | NNE 5034 | Self-healing Materials | ELECTIVE | 3 | 8 | 2 |
| Metalurgy and Material Engineering | MME 5011 | Sol-Gel Processing | ELECTIVE | 3 | 7 | 1 |
| Metalurgy and Material Engineering | MME 5041 | Structural Thermodynamics of Materials | ELECTIVE | 3 | 8 | 1 |
| Metalurgy and Material Engineering | MME 5055 | Surface Engineering | ELECTIVE | 3 | 7 | 1 |
| Metalurgy and Material Engineering | MME 5042 | Surface Treatment of Materials | ELECTIVE | 3 | 7 | 2 |
| Metalurgy and Material Engineering | MME 5027 | Texture and Anisotropy | ELECTIVE | 3 | 7 | 1 |
| Nanoscience and Nanoengineering | NNE 5033 | Colloids and Surface Chemistry | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5049 | Computational Nanoscience - I | ELECTIVE | 3 | 7 | 1 |
| Nanoscience and Nanoengineering | NNE 5052 | Computational Nanoscience - II | ELECTIVE | 3 | 7 | 2 |
| Nanoscience and Nanoengineering | NNE 5015 | Fiber Optic Chemical Sensors and Nanosensors | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5030 | Luminescent Molecules and Nanomaterials | ELECTIVE | 3 | 8 | 2 |

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|---|---|---|---|---|---|---|
| Nanoscience and Nanoengineering | PHY 5143 | Modern Quantum Mechanics-I | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | PHY 5190 | Modern Quantum Mechanics-II | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5004 | Nano Grinding Mechanisms | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5042 | Nano Mechanics and Technology in Construction | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5026 | Nanocalibration | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5006 | Nanochemistry | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5003 | Nanoelectronic and Nanocomputer | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5040 | Nanoelectronic Devices | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5022 | Nanomagnetism | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5019 | Nanometrology - I | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5024 | Nanometrology - II | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5031 | Nano-optic | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5035 | Nanostructures Dynamics | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5025 | Nanotribology | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | NNE 5012 | Organic Semiconductors | ELECTIVE | 3 | 8 | 2 |
| Nanoscience and Nanoengineering | NNE 5007 | Organometallic Nanoparticles | ELECTIVE | 3 | 8 | 1 |
| Nanoscience and Nanoengineering | PHY 5101 | Phase Transitions and Critical Phenomena-I | ELECTIVE | 3 | 7 | 1 |
| Nanoscience and Nanoengineering | FİZ 3043 | Quantum Mechanic I | ELECTIVE | 4 | 7 | 1 |
| Nanoscience and Nanoengineering | NNE 5010 | Time Resolved Fluorescence Analysis of Nanomaterials | ELECTIVE | 3 | 8 | 2 |
| Textile Engineering | TKS 5040 | Biodegradable Fibers | ELECTIVE | 2 | 7 | 2 |
| Textile Engineering | TKS 6007 | Computer Graphic Designs of Textile Structures | ELECTIVE | 2 | 7 | 1 |
| Textile Engineering | TKS 5038 | Digital Printing of Textiles | ELECTIVE | 3 | 8 | 2 |
| Textile Engineering | TKS 6002 | Dynamics of Textile Processes | ELECTIVE | 3 | 9 | 2 |
| Textile Engineering | TKS 6001 | Engineering Design of Textiles | ELECTIVE | 3 | 8 | 1 |
| Textile Engineering | TKS 5024 | Fabric Mechanics | ELECTIVE | 3 | 8 | 2 |
| Textile Engineering | TKS 5001 | Fibre and Yarn Mechanics | ELECTIVE | 3 | 8 | 1 |
| Textile Engineering | TKS 5012 | Further Analysis of Textile Mechanisms | ELECTIVE | 4 | 9 | 2 |
| Textile Engineering | TKS 6011 | High Performance Fibers | ELECTIVE | 3 | 7 | 1 |
| Textile Engineering | STA 6043 | Optimization Theory | ELECTIVE | 3 | 8 | 1 |
| Textile Engineering | TKS 5019 | Textile Composites | ELECTIVE | 3 | 8 | 1 |