|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DEPARTMENT OF CIVIL ENGINEERING**  **UNDERGRADUATE COURSE SCHEDULE FOR 2016-2017 TERM** | | | | | | | | | | | | | | | | | |
| **FIRST TERM** | | | | | | | |  | **SECOND TERM** | | | | | | | | |
| **Code** | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |  | **Code** | | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |
| PHYS 1001 | Physics I | **5** | **3,5** | **3** | **0** | **1** |  |  | PHYS 1000 | | Physics II | **5** | **3,5** | **3** | **0** | **1** |  |
| CHM 1001 | Basic Chemistry | **5** | **3,5** | **3** | **0** | **1** |  |  | MATH 1000 | | Mathematics II | **5** | **4** | **4** | **0** | **0** |  |
| MATH 1001 | Mathematics I | **5** | **4** | **4** | **0** | **0** |  |  | GEOL 1000 | | Engineering Geology | **3** | **2** | **2** | **0** | **0** |  |
| YDI 1001 | English I | **3** | **3** | **3** | **0** | **0** |  |  | CE 1002 | | Statics | **6** | **3,5** | **3** | **1** | **0** |  |
| CE 1001 | Engineering Drawing | **6** | **2** | **1** | **2** | **0** |  |  | YDI 1002 | | English II | **3** | **3** | **3** | **0** | **0** |  |
| CE 1003 | Introduction to Civil Engineering | **2** | **2** | **2** | **0** | **0** |  |  | CE 1000 | | Statistics | **4** | **3** | **3** | **0** | **0** |  |
| HIST 1001 | Atatürk`s Principles and History of Revolution I | **2** | **2** | **2** | **0** | **0** |  |  | HIST 1000 | | Atatürk`s Principles and History of Revolution II | **2** | **2** | **2** | **0** | **0** |  |
| TURK 1001 | Turkish Language I | **2** | **2** | **2** | **0** | **0** |  |  | TURK 1000 | | Turkish Language II | **2** | **2** | **2** | **0** | **0** |  |
| **Total Credit** | | **30** | **22** | **20** | **2** | **2** |  |  | **Total Credit** | | | **30** | **23** | **22** | **1** | **1** |  |
|  | | | | | | | |  |  | | | | | | | | |
| **THIRD TERM** | | | | | | | |  | **FOURTH TERM** | | | | | | | | |
| **Code** | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |  | **Code** | | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |
| CE 2001 | Materials Science | **4** | **2,5** | **2** | **1** | **0** |  |  | CE 2000 | | Construction Materials | **5** | **3,5** | **3** | **0** | **1** |  |
| MATH 2001 | Differential Equations | **5** | **4** | **4** | **0** | **0** |  |  | CE 2002 | | Strength of Materials II | **5** | **3,5** | **3** | **1** | **0** | **CE 2005** |
| CE2003 | Dynamics | **4** | **2,5** | **2** | **1** | **0** |  |  | GEOM 2002 | | Surveying | **3** | **1,5** | **1** | **1** | **0** |  |
| CE 2005 | Strength of Materials I | **5** | **3,5** | **3** | **1** | **0** |  |  | CE 2004 | | Hydrology | **3** | **2** | **2** | **0** | **0** |  |
| CE 2007 | Numerical Analysis | **4** | **2,5** | **2** | **1** | **0** |  |  | CE 2006 | | Engineering Mathematics | **5** | **4** | **4** | **0** | **0** |  |
| CE 2009 | Social Elective Course-S31 | **4** | **2** | **2** | **0** | **0** |  |  | CE 2008 | | Social Elective Course -S41 | **4** | **2** | **2** | **0** | **0** |  |
| CE 2015 | Social Elective Course-S32 | **4** | **2** | **2** | **0** | **0** |  |  | CE 2010 | | Technical Elective Course - T42 | **5** | **3** | **3** | **0** | **0** |  |
| **Total Credit** | | **30** | **19** | **17** | **4** | **0** |  |  | **Total Credit** | | | **30** | **19,5** | **18** | **2** | **1** |  |
|  | | | | | | | |  |  | | | | | | | | |
| **FIFTH TERM** | | | | | | | |  | **SIXTH TERM** | | | | | | | | |
| **Code** | **Corse Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |  | **Code** | | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |
| CE 3001 | Soil Mechanics I | **4** | **3,5** | **3** | **0** | **1** |  |  | CE 3000 | | Soil Mechanics II | **4** | **2,5** | **2** | **1** | **0** |  |
| CE 3003 | Structural Analysis I | **4** | **2,5** | **2** | **1** | **0** |  |  | CE 3002 | | Structural Analysis II | **5** | **3,5** | **3** | **1** | **0** | **CE 3003** |
| CE 3005 | Transportation I | **4** | **3,5** | **3** | **1** | **0** |  |  | CE 3004 | | Hydraulics | **3** | **2,5** | **2** | **0** | **1** | **CE 3007** |
| CE 3007 | Fluid Mechanics | **4** | **3,5** | **3** | **0** | **1** |  |  | CE 3006 | | Transportation II | **4** | **2,5** | **2** | **1** | **0** |  |
| CE 3009 | Entrepreneurship | **4** | **2** | **2** | **0** | **0** |  |  | CE 3008 | | Reinforced Concrete I | **4** | **2,5** | **2** | **1** | **0** |  |
| SEC | Technical Elective Course -T51 | **5** | **3** | **3** | **0** | **0** |  |  | CE 3010 | | Steel Structures | **5** | **3,5** | **3** | **1** | **0** | **CE 2005** |
| SEC | Technical Elective Course -T52 | **5** | **3** | **3** | **0** | **0** |  |  | SEC | | Technical Elective Course-T61 | **5** | **3** | **3** | **0** | **0** |  |
| **Total Credit** | | **30** | **21** | **19** | **2** | **2** |  |  | **Total Credit** | | | **30** | **20** | **17** | **5** | **1** |  |
|  | | | | | | | |  |  | | | | | | | | |
| **SEVENTH TERM** | | | | | | | |  | **EIGTH TERM** | | | | | | | | |
| **Code** | **Course Name** | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |  | **Code** | **Course Name** | | **ECTS** | **C** | **T** | **P** | **L** | **Pre-requisite** |
| CE 4001 | Water Resources | **4** | **3,5** | **3** | **1** | **0** |  |  | CE 4000 | Water Supply and Environmental Sanitation | | **4** | **2,5** | **2** | **1** | **0** |  |
| CE 4003 | Reinforced Concrete II | **4** | **3,5** | **3** | **1** | **0** |  |  | CE 4002 | Construction Management | | **4** | **2** | **2** | **0** | **0** |  |
| CE 4005 | Foundations | **3** | **2,5** | **2** | **1** | **0** |  |  | CE 4004 | Construction Site Safety | | **4** | **2** | **2** | **0** | **0** |  |
| CE 4007 | Engineering Design | **4** | **3** | **2** | **2** | **0** |  |  | CE 4006 | Final Thesis | | **9** | **3** | **2** | **2** | **0** | **CE 4007** |
| CE 4009 | Practical Training I | **3** | **0** | **0** | **2** | **0** |  |  | CE 4008 | Practical Training II | | **3** | **0** | **0** | **2** | **0** |  |
| SEC | Technical Elective Course-T71 | **6** | **3** | **3** | **0** | **0** |  |  | SEC | Technical Elective Course-T81 | | **6** | **3** | **3** | **0** | **0** |  |
| SEC | Technical Elective Course-T72 | **6** | **3** | **3** | **0** | **0** |  |  |  |  | |  |  |  |  |  |  |
| **Total Credit** | | **30** | **18,5** | **16** | **7** | **0** |  |  | **Total Credit** | | | **30** | **12,5** | **11** | **5** | **0** |  |
|  | | | |  |  |  |  |  | **General Total: 240 ECTS 155,5 Credits** | | | | | | | | |
| Only one course should be chosen from each group of the elective courses | | | | | | | | | | | | | | | | | |

**The ratio of elective courses (to total credits) : 27 credits /155,5= 0,174 (%17,4)**

**The ratio of elective courses (to total ECTS credits) : 50/240= 0,208 (%20,8)**

**DEPARTMENT OF CIVIL ENGINEERING**

**ELECTIVE COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| THIRD TERM | | | |
|  | Social Elective Courses-S31 |  | Social Elective Courses-S32 |
| CE2009 | Vocational English | CE2015 | Presentation Techniques |
|  | Reading and Writing in English |  | Communication Skills |
| CE2025 | Business English | CE2029 | Engineering Ethics |
|  |  |  | People and Environment |
|  |  | USEC0001 | History of Science |
|  |  | USEC0003 | Occupational Ethics |
|  |  | USEC0015 | Project Management |
| FOURTH TERM | | | |
|  | Social Elective Courses–S41 |  | Technical Elective Courses-T42 |
| |  | | --- | | CE 2012 | | Introduction to Marketing | CE 2022 | Artificial Intelligence Methods |
| |  | | --- | | CE 2014 | | Business Law | CE2024 | Computer Programming |
| |  | | --- | | CE 2016 | | Creativity in Management | CE 2010 | Computer-Aided Drawing |
| CE 2008 | Human Resources and Management | CE 2026 | MATLAB Applications in Civil Engineering |
| CE 2018 | Business Administration |  |  |
| CE 2020 | Construction Contracts |  |  |
| USEC0006 | General Sociology |  |  |
| USEC0008 | Protection of Personal Data |  |  |
| USEC0012 | Career Planning |  |  |
| FIFTH TERM | | | |
|  | Technical Elective Courses-T51 |  | Technical Elective Courses-T52 |
|  | Construction Machinery | CE 3021 | Concrete Technology |
|  | Information Architecture |  | Traditional Building Materials |
| CE 3015 | Structural Elements |  | Insulation Systems and Materials |
|  | Building Physics |  | Stabilization of Soils |
|  | Insulation in Buildings |  | Environmental Systems in Civil Engineering |
|  |  | CE 3031 | Mechanical Vibrations |
|  | SIXTH TERM | | |
|  | Technical Elective Courses-T61 | | |
| CE 3012 | Water Treatment Technology | | |
| CE 3014 | Masonry Structures | | |
| CE 3016 | Computer-Aided Structural Analysis | | |
| CE 3018 | Introduction to Earthquake Engineering | | |
| CE 3020 | Soil Mechanics III | | |
| CE 3022 | Introduction to Shallow Foundations | | |
| CE 3024 | Computer Applications in Geotechnical Engineering | | |
| CE 3026 | Computer-Aided Road Design | | |
| SEVENTH TERM | | | |
|  | Technical Elective Courses–T71 |  | Technical Elective Courses-T72 |
| CE 4013 | Railway | CE 4027 | Asphalt Pavement |
| CE 4011 | Design Principles of Dams | CE 4029 | Coastal and Harbor Structures |
| CE 4015 | Earthquake Resistant Structural Design | CE 4031 | Design of Reinforced Concrete Bridges |
| CE 4017 | Prestressed Structural Concrete Elements | CE 4033 | Timber Structures |
| CE 4019 | Marine Discharge Structures | CE 4035 | Water Power Structures |
| CE 4021 | Design Principles of Retaining Walls | CE 4037 | Introduction to Deep Foundations |
| CE 4023 | Irrigation Systems | CE 4039 | Transportation III |
| CE 4025 | Multistory Structures | CE 4041 | Coastal Engineering |
| CE 4045 | Time Planning in Construction Projects | CE 4043 | Computer-Aided Design of Steel Structures |
| EIGTH TERM | | | |
|  | Technical Elective Courses-T81 | | |
| CE 4010 | Wastewater Treatment Structures | | |
| CE 4012 | Structural Analysis III | | |
| CE 4014 | Computer-Aided Building Design | | |
| CE 4016 | Design and Calculation of Steel Structures | | |
| CE 4018 | Introduction to Finite Element Method | | |
| CE 4020 | Introduction to Structural Dynamics | | |
| CE 4022 | Tunnels | | |
| CE 4024 | Soil Investigation | | |

Only one course will be chosen from each group of the elective courses.