**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **TURKISH LANGUAGE I** | 221011006 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 | 2 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To show the richness of Turkish by informing students about the development and current situation of Turkish, to gain a national language awareness, to ensure that they can speak and write Turkish correctly. To compare Turkish language with major languages in the world. To compare the language policies of major languages with the language policy of Turkish language. To give speech training. |
| **Short Course Content** | Definition and properties of language; languages of the world and the place of Turkish among the world languages; historical development of Turkish language and the development of Western Turkish; Atatürk's studies and views on Turkish language; phonetics; spelling rules and punctuation; language policies. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Türkçenin kurallarını tanımlar. | 1,10 | 1,5,11,6 | A |
| **2** | Yazım kurallarını uygular. | 1,10 | 1,5,11,6 | A |
| **3** | Türkçeyi doğru kullanır. | 1,10 | 1,5,11,6 | A |

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| **Main Textbook** | *Türk Dili I-II*, ed. Ferruh Ağca, Eskişehir Osmangazi Üniversitesi Yayınları, 2022**.** |
| **Supporting References** | *Üniversiteler İçin Türk Dili*, Bayrak Yayınları, İstanbul, 1997. |
| **Necessary Course Material** |  |

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| **Course Schedule** | |
| **1** | Definition of Language |
| **2** | Language-Nationality-Culture Relationship |
| **3** | World Languages and Turkish Language |
| **4** | Age of Turkish Language |
| **5** | Historical Development of Turkish Language |
| **6** | Alphabets Used in Turkish Writing |
| **7** | Writing Revolution |
| **8** | Mid-Term Exam |
| **9** | Phonetics of Turkish Language |
| **10** | Phonetics of Turkish Language |
| **11** | Morphology of Turkish Language |
| **12** | Morphology of Turkish Language |
| **13** | Word Groups |
| **14** | Word Groups |
| **15** | Word Groups |
| **16,17** | Final Exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 4 | 4 | 16 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 2 | 2 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 2 | 2 |
| Studying for Final Exam | 1 | 4 | 4 |
|  | **Total workload** | | **56** |
|  | **Total workload / 30** | | **1,86** |
|  | **Course ECTS Credit** | | **2** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 2 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** |  | 4 |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **THE HISTORY OF THE PRINCIPLES AND THE REVOLUTIONS OF ATATURK I** | 221011001 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 | 2 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** | None |
| **Objectives of the Course** | Students can understand the Liberation War under the leadership of Atatürk and the foundation of the young Turkish Republic. In addition to that the students will learn the processes of the liberation war and the conditions before the foundation of the Republic. |
| **Short Course Content** | The description of the revolution; the history of the Ottoman Empire up to the beginning of the Great War; Great War; The Treaty of Mudros; The Life of Mustafa Kemal Pasha; Civil Organizations for the liberation; Mustafa Kemal’s arrival to Samsun; Congresses; National Oath and the Opening of Turkish Grand National Assembly; Liberation War till the Battle of Sakarya; Büyük Taarruz. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | STUDENTS,  understand the main concepts of the course like reform, revolution | 1,10 | 1 | A,K |
| **2** | learn the short history of the Ottoman Empire up to the Great War | 1,10 | 1 | A,K |
| **3** | understand the join of the Ottoman Empire to the Great War and the fronts in which the Ottoman Empire fought | 1,10 | 1 | A,K |
| **4** | learn the Treaty of Mudros and the invasion of the Ottoman lands | 1,10 | 1 | A,K |
| **5** | understand the life of Mustafa Kemal Pasha (Atatürk) | 1,10 | 1 | A,K |
| **6** | learn Mustafa Kemal’s arrival to Samsun and the beginning of the Liberation War | 1,10 | 1 | A,K |
| **7** | understand the opening of Turkish Grand National Assembly and the foundation of national army | 1,10 | 1 | A,K |
| **8** | learn the victories of İnonü, Sakarya and Büyük Taarruz | 1,10 | 1 | A,K |

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| **Main Textbook** | Turan Şerafettin, *Türk Devrim Tarihi, C.I-II*, İstanbul, 1991–1995 |
| **Supporting References** | Ateş, Toktamış, *Türk Devrim Tarihi*, İstanbul: Der Yayınları, 2001.  Aybars, Ergün, *Türkiye Cumhuriyeti Tarihi*, İzmir: Ercan Kitabevi, 2000.  Eroğlu, Hamza, *Türk İnkılap Tarihi*, Ankara: Savaş Yayınları, 1990.  Kongar, Emre, *Devrim Tarihi ve Toplumbilim Açısından Atatürk*, İstanbul: Remzi Kitabevi, 1999.  Selek, Sebahattin, *Anadolu İhtilali,* İstanbul: Kastaç Yayınları, 1987.  Timur, Taner, *Türk Devrimi ve Sonrası*, Ankara: İmge Kitabevi, 1997. |
| **Necessary Course Material** |  |

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| **Course Schedule** | |
| **1** | The teaching of the concepts of Revolution, Evolution, Uprising etc. |
| **2** | The attempts for the modernisation of the Ottoman Empire and the political thoughts |
| **3** | The Wars of Trablusgarp and the Balkans |
| **4** | The Beginning of the Great War and the join of the Ottoman Empire |
| **5** | The fronts in which the Ottoman Empire fought |
| **6** | The end of the war and the partition of the Ottoman |
| **7** | The Treaty of Mudros and the invasion of the Ottoman lands |
| **8** | Mid-Term Exam |
| **9** | The trip of Mustafa Kemal to Samsun and the beginning National Struggle |
| **10** | National Oath and the opening of Turkish Grand National Assembly |
| **11** | National Assembly and the direction of liberation war |
| **12** | National Forces and the foundation of the national army |
| **13** | First and Second Victories of İnönü; The battles of Kütahya-Eskişehir |
| **14** | The Battle of Sakarya |
| **15** | Great Attack of 30th August |
| **16,17** | Final Exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) | 1 | 1 | 1 |
| Mid-Term Exam | 1 | 8 | 8 |
| Studying for Mid-Term Exam | 1 | 1 | 1 |
| Final Exam | 1 | 8 | 8 |
| Studying for Final Exam | 14 | 2 | 28 |
|  | **Total workload** | | **60** |
|  | **Total workload / 30** | | **2** |
|  | **Course ECTS Credit** | | **2** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| ENGLISH I | 221011007 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 2 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| English | Associate degree | Compulsory |

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| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | Students at this level can understand sentences and frequently-used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment).  Students can understand clear, slow, standard speech related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local geography and employment) and can catch the main point in short, clear, simple messages and announcements.  Students are able to read and understand short, simple texts containing high frequency vocabulary and shared international expressions.  Students can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities.  They can write short, simple notes and messages relating to matters in areas of immediate need, linking a series of simple phrases and sentences with simple connectors like ‘and’ , ‘but’ and ‘because’. |
| **Short Course Content** | The aim of the course is to teach students basic grammar rules in elementary level, give them speaking, writing, reading and listening knowledge of English. It consists of content and activities aimed at having students acquire Beginner Level English language skills according to evaluation and reference system of The Common European Framework. |

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| **Learning Outcomes of the Course** | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| To be able to communicate orally and in writing in English. | 1,10 | 1, 4, 5, 11 | A |

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| **Main Textbook** | Warwick L., Williams D. (2020). *Roadmap A2 Students’ Book & Workbook*. Pearson Education Limited. |
| **Supporting References** | Murphy, R., (2004). *English Grammar in Use*, Cambridge University Press, |
| **Necessary Course Material** | Computer, Webcam, Speakers; or Smart phone |

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| **Course Schedule** | |
| **1** | 1A: verb be – positive and negative - countries and nationalities  contractions with be introduce yourself - write an online message - using capital letters and full stops |
| **2** | 1B: questions with *be* question words intonation in questions ask and answer questions - understand a simple conversation understanding question words |
| **3** | 1C: *this, that, these* and those everyday objects - *this*, *these* talk about things for sale - understand adverts identifying specific information  1D: tell the time |
| **4** | 2A: possessive adjectives and possessive ’*s* family members possessive *’s* describe your family - understand a conversation about family - and, too and but  2B: *whose* and possessive pronouns - everyday objects 2 - possessive pronouns say who things belong to - understand online posts - understanding the important words |
| **5** | *2C: have got -* adjectives describing objects *have*/*has* describe objects English in action buy things in a shop buy things in a shop - write a review of a product using and, but and so  2D: buy things in a shop |
| **6** | 3A present simple with *I, you, we* and *they*; adverbs of frequency and time expressions - free-time activities  - talk about free-time Activities - write an online profile - using commas and apostrophes |
| **7** | 3B present simple with *he, she* and *it -* everyday activities - present simple with *he, she* and *it-* describe daily routines - understand a factual text - using headings to find information |
| **8** | Mid-Term Exam |
| **9** | 3C present simple questions free-time activities 2 *do*/*does* ask about free-time activities – understand short talks - understanding key words  3D buy tickets |
| **10** | 4A there is/are - places in a city - linking - talk about your city - write a description - using word order correctly  4B articles - things in a home - the - describe your home - understand social media posts - guessing new words |
| **11** | 4C need + noun, need + infinitive with to - equipment - weak forms - discuss what to take on a trip - understand a short radio programme - understanding weak forms  4D ask for information |
| **12** | 5A position of adjectives - appearance - tonic stress on adjectives - describe people’s appearance - write a description of a person - using paragraphs |
| **13** | 5B was/were - adjectives to describe experiences - weak forms of was/were - describe an experience - understand a story - linking between words |
| **14** | 5C can/can’t for ability - skills - can/can’t - describe your skills - understand information in a brochure - understanding it, they and them  5D make and respond to requests |
| **15** | |
| **15,16** | Final Exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework | 1 | 2 | 2 |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 2 | 2 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 2 | 2 |
| Studying for Final Exam | 1 | 6 | 6 |
|  | **Total workload** | | **72** |
| **Total workload / 30** | | **2,4** |
| **Course ECTS Credit** | | **2** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM**  **OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **CALCULUS I** | 221311165 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | Perform arithmetic and algebraic operations. To be able to calculate the exponent, the root of a real number. Solving equations and inequalities. Draw line and parabola. To be able to use trigonometric ratios. Comprehension of complex numbers. To be able to comprehend the properties of exponential and logarithmic functions. |
| **Short Course Content** | Numbers, Algebra, Equations and Inequalities, Functions, Trigonometry, Complex Numbers, Logarithms |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Makes quantity and discovery operations and can organise progress payments. | 1,4,10 | 1, 5, 8, 10,11 | A |

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| **Main Textbook** | 1. Anadolu Üniversitesi Yayınları Genel Matematik. Eskişehir  2. Görgülü., A. (2000) Genel Matematik. Eskişehir  3. Şenel, M. , Orhun N. , Tüzemen Ş. ( 2003) Genel Matematik. Eskişehir  4. Yıldız E. (2004) Genel Matematik. Trabzon  5. Argün Z. (2001) Temel Matematik. Ankara : Seçkin Yayınevi |
| **Supporting References** |  |
| **Necessary Course Material** | Miter, protractor, compass and calculator. |

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| **Course Schedule** | |
| **1** | Number Sets, Operations, Process Priority |
| **2** | Exponents, Radical Numbers, Absolute Value |
| **3** | Identities, 1 Equations |
| **4** | 2nd Degree Equations and Inequalities |
| **5** | Function, Numerical Functions |
| **6** | Linear Functions and their graphs |
| **7** | Polynomial Functions and their graphs |
| **8** | Mid-term exam |
| **9** | Rational and Algebraic Functions |
| **10** | Rational and Algebraic Functions |
| **11** | Trigonometry Functions |
| **12** | Complex Numbers |
| **13** | Numbers Complex Applications |
| **14** | Funtions Exponential and Logarithms |
| **15** | Funtions Exponential and Logarithms |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 2 | 5 | 10 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 2 | 6 | 12 |
|  | **Total workload** | | **80** |
|  | **Total workload / 30** | | **2,666666667** |
|  | **Course ECTS Credit** | | **3** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 5 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **INFORMATION AND COMMUNICATION TECHNOLOGY** | 221311171 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 1 | 2 | 2 | 2 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | Providing basic computer training |
| **Short Course Content** | Computer hardware, software and basic operating system training |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To have theoretical and practical knowledge about basic information technologies. | 2,9 | 1, 2, 5,6,11 | A,D |
| **2** | Knowledge of hardware and software. | 2,9 | 1, 2, 5, 6,11 | A,D |
| **3** | Raising awareness about information security | 2,9 | 1, 2, 5,6,11 | A,D |

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| **Main Textbook** | MS OFFICE BOOK |
| **Supporting References** | Slides Related to Course Contents |
| **Necessary Course Material** | Projection, Computer |

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| **Course Schedule** | |
| **1** | Introduction to Computing |
| **2** | Hardware units of the computer |
| **3** | Operation of a computer |
| **4** | Examination of the hardware units of computers in a laboratory environment |
| **5** | Windows Operating Systems |
| **6** | Installing the Windows Operating System |
| **7** | Computer Viruses |
| **8** | Midterm Exams |
| **9** | Microsoft Word |
| **10** | Microsoft Word |
| **11** | Microsoft Excel |
| **12** | Microsoft Powerpoint |
| **13** | Microsoft Access |
| **14** | Computer Networks and the Internet |
| **15** | Computer Networks and the Internet |
| **16,17** | Final exams |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 48 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 2 | 4 | 8 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 4 | 14 |
|  | **Total workload** | | **60** |
|  | **Total workload / 30** | | **2** |
|  | **Course ECTS Credit** | | **2** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 25 |
| Homework | 25 |
|  |  |
|  |  |
|  |  |
| **Final Exam** | 50 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 4 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **STATİCS AND STRENGTH** | 221311166 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 2 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The main purpose of this course is to enable students to perform force analyzes of mechanical structures in static equilibrium and strength analyzes under different loading conditions. |
| **Short Course Content** | The course content consists of two parts: statics and strength. Statics topics: vector algebra and force vectors, concept of moment, static equilibrium for particles, equivalent force systems, balance in rigid bodies; distributed loads, center of gravity and moment of inertia. The strength part consists of the concepts of stress and strain, mechanical properties of materials, axial loading, torsion, bending and deformation, transverse shear, resultant loading and stress transformation. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Understanding carrier systems. | 1,10 | 1,5 | A |
| **2** | Understanding the concepts of stress and strain. | 1,10 | 1,5 | A |
| **3** | To be able to analyze the strength states that occur under different loadings. | 7,10 | 1,5 | A |
| **4** | To be able to calculate stress and deformations under loading | 1,7,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Karaduman, M., Umucalılar, A., 2003, Applied Mechanics (Statics) and Strength |
| **Supporting References** | - |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Vectors and forces |
| **2** | Equivalent force systems |
| **3** | Equilibrium equations, Free body diagrams |
| **4** | centers of gravity |
| **5** | Moments of inertia |
| **6** | Plane and space truss systems |
| **7** | Applications |
| **8** | Mid-Term Exam |
| **9** | The subject and purpose of strength |
| **10** | Principles of strength |
| **11** | Principles of strength |
| **12** | Internal force, internal force components, cross-section effects |
| **13** | Stress, deformation |
| **14** | Stress-strain relations |
| **15** | Strain energy |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 7 | 7 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 7 | 7 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **MATERİALS SCİENCE AND CONSTRUCTİON MATERİALS** | 221311125 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To explain the internal structure of materials and the effect of internal structure on material classification, to introduce crystal and amorphous structures, to teach the mechanical properties of the material, to teach the physical and chemical properties of the material, water and heat permeability in materials, the effect of sound, resistance to external effects such as radiation, oxidation and corrosion, harmful water and pollutants. To give information about the effects of weather, to introduce metals, ceramics and polymers commonly used in civil engineering. |
| **Short Course Content** | Interatomic bonds, internal structure of matter, the effect of internal structure on material classification, crystal and amorphous structures, mechanical properties of materials, physical and chemical properties of materials, technological properties, water and heat transmission in materials, the effect of sound, resistance to external effects such as radiation, oxidation and corrosion, harmful water. and the effects of polluted air, metals, ceramics, polymers. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To teach the basic material knowledge required for the civil engineer, the properties of commonly used materials for civil engineering, and to gain knowledge about basic material tests and standards for application. | 1,6,7,10 | 1,5 | A |

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| **Main Textbook** | Materials Science, Prof. Dr. Kaşif ONARAN, Bilim Teknik Publishing House, 1993. |
| **Supporting References** | Materials Science, Prof. Dr. Kaşif ONARAN, Bilim Teknik Publishing House, 1993.  Materials Science Prob. and Solutions, Prof. Dr. Kaşif ONARAN, Bilim Teknik Yay, 1993.  Prof. Dr. Şirin KURBETÇİLecture Notes  Prof. Dr. Şakir ERDOĞDU Lecture Notes  Prof. Dr. İlker Bekir TOPÇU Lecture Notes  Structure and Properties of Materials, Volume I, Internal Structures, Volume III, Mechanical Properties, Written by: Moffatt, Pearsall and Wulff, Translated by: K. Onaran and B. Erman, İTÜ Publication, 1982 and 1978.  Civil Engineering Materials, Ed. N. Jackson, 1984.  The Nature and Properties of Engineering Materials, Zbigniev D. Jastrazebski, 1987.  Materials Science for Structural Engineers, Prof. Dr. Ferruh KOCATAŞKIN, 1976. |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Internal structure and its relationship with properties: atomic structure, atomic arrangement, interatomic bonds, relations between interatomic bonds and properties, classification of materials. |
| **2** | Crystal and Amorphous Structures: Types of Crystal Structures, Definitions Related to Crystal Structures, Crystal Structure Defects, Amorphous Structures. |
| **3** | Mechanical properties of materials: mechanical behavior, material behavior under tensile effect, (laboratory 1) ductility, brittle materials, material behavior under pressure, material behavior under shear effect, material behavior under bending effect, |
| **4** | Mechanical properties of materials: material behavior under torsion, material behavior under buckling, deformation of materials, processes that increase material strength, fracture in materials. |
| **5** | Physical and chemical properties of materials: physical properties, unit volume weight, density, specific gravity, void ratio (porosity) and filling ratio (compactness), saturation ratio, frost resistance of stones. |
| **6** | Physical and chemical properties of materials: properties related to the presence of water, permeability, capillarity, chemical properties, Technological properties: hardness in materials, wear, fatigue in materials, creep, rheological models, viscosity. |
| **7** | Physical and chemical properties of materials: properties related to the presence of water, permeability, capillarity, chemical properties, Technological properties: hardness in materials, wear, fatigue in materials, creep, rheological models, viscosity. |
| **8** | Mid-Term Exam |
| **9** | Thermal properties: thermal expansion and thermal stresses, thermal conductivity, heat events in structures, material and thickness selection in walls, moisture events. |
| **10** | Thermal properties: thermal expansion and thermal stresses, thermal conductivity, heat events in structures, material and thickness selection in walls, moisture events. |
| **11** | Acoustic properties: absorption and reflection of sound, sound insulation in buildings. |
| **12** | Harmful external effects and protection measures: atmospheric effects, chemical effects, fire effect, effect of organisms. |
| **13** | Metals: iron-carbon alloys and their uses, other metals and alloys, steel examination and test methods. Ceramics: crystalline ceramics, amorphous ceramics (glasses), glass-bonded ceramics (terracotta products). Polymers, bituminous materials and wood: polymers, asphalt and bitumen, wood. |
| **14** | Ceramics and glasses, polymers, bituminous materials and wood |
| **15** | Composite materials: granular composite materials, fibrous composite materials, layered composite materials. Collodial materials: |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | | |
| **Activities** | | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | | 10 | 4 | 40 |
| Homework | |  |  |  |
| QuizExam | |  |  |  |
| Studying for Quiz Exam | |  |  |  |
| Oral exam | |  |  |  |
| Studying for Oral Exam | |  |  |  |
| Report (Preparation and presentation time included) | |  |  |  |
| Project (Preparation and presentation time included) | |  |  |  |
| Presentation (Preparation time included) | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
| Mid-Term Exam | | 1 | 1 | 1 |
| Studying for Mid-Term Exam | | 1 | 10 | 10 |
| Final Exam | | 1 | 1 | 1 |
| Studying for Final Exam | | 1 | 10 | 10 |
|  | | **Total workload** | | **90** |
|  | | **Total workload / 30** | | **3** |
|  | | **CourseECTSCredit** | | **3** |
| **Evaluation** | | | | |
| **Activity Type** | **%** | | | |
| Mid-term | 40 | | | |
| Quiz |  | | | |
| Homework |  | | | |
|  |  | | | |
|  |  | | | |
| **Final Exam** | 60 | | | |
| **Total** | 100 | | | |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 5 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING TECHNOLOGY I** | 221311169 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To introduce the students to the classification of buildings and structures, underground works, above ground works and coating works used in the building. |
| **Short Course Content** | Classification of buildings and structures, Foundation Ground, Types of Ground, Types of Ground Investigations, excavation, arbitration, drainage and under ground works such as foundations, walls, wall types and knitting rules, chimneys, stairs and roofs, above ground works such as roofs, coating with natural and artificial materials. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to recognise structure and structure classes, | 1,5,10 | 1,5 | A |
| **2** | To be able to comprehend the work done under the ground such as excavation, arbitration, drainage and foundation, | 1,5,10 | 1,5 | A |
| **3** | To be able to comprehend above ground works such as walls, wall types and knitting rules, chimneys, stairs and roofs, | 1,5,10 | 1,5 | A |
| **4** | To be able to comprehend coating with natural and artificial materials (interior and exterior plaster, whitewash, plastic and oil paint, tile, tile, wooden parquet, etc.). | 1,5,10 | 1,5 | A |
| **5** | To be able to recognise building and building classes, | 1,5,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Güner, M. S., Yüksel A., (2001), Yapı Teknolojisi I-II, İstanbul, Aktif Yayınevi. |
| **Supporting References** | 1. Güner, M. S., Yüksel A., (2001), Yapı Teknolojisi I-II, İstanbul, Aktif Yayınevi.  2. Özcan, K.,(1990), Yapı, Ankara. Özel Basım.  3. Açıkel, D., Altın, M., Dorum, A., 2021. Yapı Teknolojisi,Nobel Yayınevi |
| **Necessary Course Material** | Projector, Computer, blackboard |

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| --- | --- |
| **Course Schedule** | |
| **1** | Classification of building and structures |
| **2** | Foundation Soil, Soil Types, Types of Soil Investigations |
| **3** | Underground works such as excavation, excavation, drainage and foundation |
| **4** | Wall, wall types and knitting rules |
| **5** | Wall, wall types and knitting rules |
| **6** | Chimneys, types, calculations, construction rules, |
| **7** | Chimneys, types, calculations, construction rules, |
| **8** | Midterm Exam |
| **9** | Roofs, roof types, construction stages, construction rules |
| **10** | Roofs, roof types, construction stages, construction rules |
| **11** | Stairs, calculations, types, construction rules |
| **12** | Stairs, calculations, types, construction rules |
| **13** | Cladding with natural and artificial materials. |
| **14** | Ramps |
| **15** | Elevators |
| **16,17** | Final Examination |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING INSTALLATION** | 221311170 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
| ✓ | ✓ |  |  |  |

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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

|  |  |
| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | 1. To be able to comprehend the definitions, concepts and rules related to electrical electrical installation. 2. To be able to comprehend the issues to be considered in the construction of clean water installation. 3. To be able to comprehend the importance of fire installation and the rules to be followed in the construction of this installation. 4. To be able to recognise waste and dirty water installation and to understand the principles of construction of this installation. 5. To be able to recognise and comprehend the principles of construction of the low water installation. 6. Recognise heating and ventilation installations and understand the issues to be considered in the construction of these installations. |
| **Short Course Content** | Recognition of materials used in electrical installations, building sanitary installations, heating, ventilation and hot water installations, understanding the principles of installation construction. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Recognise electricity, clean water, fire, waste and dirty water, hot water, heating and ventilation installations, to know their functions. | 1,10 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Cavit SIDAL-Etem Sait ÖZ - Yapıda Sıhhi Tesisat |
| **Supporting References** | Sabri KUMRAL Tesisat Teknolojisi İş ve İşlem Yaprakları 10. sınıf  Sabit OYMAEL Yapı Bilgisi 2  MEB, Makine Teknolojisi, Sıhhı Tesisat Resim  MEB, Tesisat Teknolojisi ve İklimlendirme, Sıhhi Tesisat Projesi |
| **Necessary Course Material** | Projector, Computer, blackboard |

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| **Course Schedule** | |
| **1** | Access to the installation |
| **2** | Electrical installation in the building |
| **3** | Electrical installation in the building |
| **4** | Building clean water installation |
| **5** | Building clean water installation |
| **6** | Fire installation |
| **7** | Fire installation |
| **8** | Midterm exam |
| **9** | Waste and dirty water installation |
| **10** | Waste and dirty water installation |
| **11** | Hot water installation |
| **12** | Hot water installation |
| **13** | Heating and ventilation installations |
| **14** | Heating and ventilation installations |
| **15** | Installation Project reading (application) |
| **16,17** | Final exams |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 3 | 36 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 12 | 12 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 12 | 12 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **INSULATION TECHNOLOGY** | 221311127 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To obtain information about the importance and application of insulation in buildings. |
| **Short Course Content** | Types of insulation and their general definitions, Water insulation materials in building foundations, Water insulation application in building foundations, Thermal insulation materials in buildings, Thermal insulation application in buildings, Sound insulation materials in buildings, Sound insulation application in buildings, Fire insulation materials in buildings, Fire insulation application in buildings |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To obtain information about the application of insulation in buildings | 1,7,10 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Insulation Techniques, Asst. Associate Professor. Cevdet Emin EKİNCİ, 2003 |
| **Supporting References** | Lecture notes |
| **Necessary Course Material** | Projection |

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| --- | --- |
| **Course Schedule** | |
| **1** | Insulation types and general definitions |
| **2** | Insulation types and general definitions |
| **3** | Waterproofing materials in buildings |
| **4** | Waterproofing application in buildings |
| **5** | Thermal insulation materials in buildings |
| **6** | Thermal insulation application in buildings |
| **7** | Water and thermal insulation examples |
| **8** | Mid-Term Exam |
| **9** | Waterproofing on the foundation of the structure |
| **10** | Sound insulation materials in buildings |
| **11** | Sound insulation application in buildings, |
| **12** | Fire insulation materials in buildings |
| **13** | Fire insulation application in buildings |
| **14** | Application errors in structures |
| **15** | Application errors in structures |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **CourseECTSCredit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING INFORMATION** | 221311128 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | Basic actions (sleeping, eating, working, recreation, health) are analyzed as spatial characteristics in different building types and design criteria are given. By creating a theoretical background with the concepts of architecture and architectural planning process, by revealing the needs of the individual and its relations with the environment, to work on housing, one of the main spaces in which human life takes place. |
| **Short Course Content** | Architectural project design stages, preparation of the building needs program, the effect of human and object dimensions on the sizing of the building, land-structure-environment relationship, design principles of housing, function schemes, orientation, building layouts, housing types. |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to learn application principles at the architectural project stage | 1,7,10 | 1,5,15 | A, D |

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| --- | --- |
| **Main Textbook** | Lecture Notes |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| --- | --- |
| **Course Schedule** | |
| **1** | General information about building types |
| **2** | Housing |
| **3** | Education structures |
| **4** | Health structures |
| **5** | Trade structures |
| **6** | Homework Presentations |
| **7** | Homework Presentations |
| **8** | Midterm exam |
| **9** | Industrial buildings |
| **10** | Sport structures |
| **11** | Defense structures |
| **12** | Religious buildings |
| **13** | Types, content and meanings of building regulations |
| **14** | Homework presentations |
| **15** | Homework presentations |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) |  |  |  |
| Homework | 2 | 10 | 20 |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 13 | 13 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 13 | 13 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term |  |
| Quiz |  |
| Homework | 40 |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 4 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **TRANSPORTATION** | 221311167 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | This course provides students with information about transportation systems. |
| **Short Course Content** | Transportation Systems Highway standards Highway Route Horizontal Curves Vertical Curves Cross-section removal and Superelevation Map and Land Observations Filling and Cutting Works Art Structures Route earthworks Road Superstructure Materials Asphalt Pavements Concrete Coating |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Will be able to determine the topographic condition of the land. | 1,3,10 | 1,5 | A |
| **2** | Will be able to choose the route | 1,3 | 1,5 | A |
| **3** | Will be able to implement highway standards. | 1,3 | 1,5 | A |
| **4** | Will be able to make calculations regarding the highway. | 1,7 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Highway Construction, Prof. Dr. Nadir Yayla, ITU |
| **Supporting References** | - |
| **Necessary Course Material** | Calculator |

|  |  |
| --- | --- |
| **Course Schedule** | |
| **1** | Transportation Systems |
| **2** | highway standards |
| **3** | Highway Route |
| **4** | Horizontal and vertical curves |
| **5** | Cross-section removal and superelevation |
| **6** | Preparing a Plan |
| **7** | Maps and Land Observations |
| **8** | Mid-Term Exam |
| **9** | Filling and splitting works |
| **10** | Filling and splitting works |
| **11** | Art structures |
| **12** | Route earthworks |
| **13** | Road Pavement Materials |
| **14** | Asphalt Pavements |
| **15** | Concrete Coating |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **CourseECTSCredit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 5 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 4 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| ENTREPRENEURSHIP | 221311164 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
| X |  |  |  |  |

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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

|  |  |
| --- | --- |
| **Prerequisite(s) if any** | No |
| **Objectives of the Course** | The entrepreneurship course aims to learn topics related to the concepts of enterprise and entrepreneur, to explain the key concepts in entrepreneurship, and to build a bridge between the theoretical framework and applications in daily life. |
| **Short Course Content** | Entrepreneur, entrepreneurship, business and management, examples of successful and unsuccessful entrepreneurship |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Understandingwho an entrepreneur is andwho he is not | 9 | 1,2,5 | A |
| **2** | Abilitytoexplainthebasicconcepts of entrepreneurship | 9 | 1,2,5 | A |
| **3** | Abilitytodrawtheframework of entrepreneurshipwithreal-life examples | 9 | 1,2,5 | A |
| **4** | Be aware of differentaspectsanddimensions of entrepreneurship | 9 | 1,2,5 | A |
| **5** | Learning businessmanagementandclassification | 9 | 1,2,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Entrepreneurship and Small Business Management (Orhan KÜÇÜK) |
| **Supporting References** |  |
| **Necessary Course Material** | Computer and projector |

|  |  |
| --- | --- |
| **Course Schedule** | |
| **1** | Entrepreneur, entrepreneurship |
| **2** | EntrepreneurshipandRelatedConcepts |
| **3** | Types of Entrepreneurship |
| **4** | Characteristics of SuccessfulEntrepreneursand Development of EntrepreneurshipCulture |
| **5** | SuccessandFailureFactors in EntrepreneurshipwithExamplesfromthe World and Türkiye |
| **6** | Research on the Enterprise EstablishmentProcessandFeasibilityStudy (General Framework) |
| **7** | Theimportance of entrepreneurship in theeconomy |
| **8** | Midterm |
| **9** | Business andmanagement |
| **10** | Business andmanagement |
| **11** | Classification of businesses |
| **12** | Classification of businesses |
| **13** | SupportforEntrepreneurs |
| **14** | SupportforEntrepreneurs |
| **15** | SupportforEntrepreneurs |
| **16,17** | Final Exams |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) |  |  |  |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 14 | 1,5 | 21 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 14 | 1,5 | 21 |
|  | **Toplam iş yükü** | | **86** |
|  | **Toplam iş yükü / 30** | | **2,87** |
|  | **Dersin AKTS Kredisi** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Bir öğe seçin. |  |
| Bir öğe seçin. |  |
| Bir öğe seçin. |  |
| Bir öğe seçin. |  |
| **Final Exam** | 60 |
| **Total** | 100 |

|  |  |  |
| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **11** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

| **Course Name** | **Course Code** |
| --- | --- |
| GENERAL AND TECHNICAL COMMUNICATION | 221311163 |

| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| --- | --- | --- | --- | --- |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 | 3 |

| **Course Category (Credit)** | | | | |
| --- | --- | --- | --- | --- |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
|  |  |  |  | X |

| **Course Language** | **Course Level** | **Course Type** |
| --- | --- | --- |
| Turkish | Associate degree | Elective |

| **Prerequisite(s) if any** | NONE |
| --- | --- |
| **Objectives of the Course** | The aim of this course is to teach communication methods and to increase the student's communication skills. |
| **Short Course Content** | Definition of communication, its importance, individual and mass communication methods |

| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| --- | --- | --- | --- | --- |
| **1** | Know the principles of communication | PÇ9,PÇ10 | 1, 2, 5, 11 | A |
| **2** | Can set goals and set goals in communication. | PÇ9,PÇ10 | 1, 2, 5,11 | A |
| **3** | People who may encounter in business life (employee, employer, customer, etc.) communicate successfully in relationships | PÇ9,PÇ10 | 1, 2, 5,11 | A |

| **Main Textbook** | Anadolu Üniversitesi Yayınları, SÖZLÜ VE SÖZSÜZ İLETİŞİM- Aralık 2018-Eskişehir  Anadolu Üniversitesi Yayınları, İKNA EDİCİ İLETİŞİM - Ağustos 2018-Eskişehir |
| --- | --- |
| **Supporting References** | Slides Prepared by the Instructor Regarding the Course Content, Lecture Notes |
| **Necessary Course Material** | Blackboard- Projection, Computer |

| **Course Schedule** | |
| --- | --- |
| **1** | Definitions and importance of communication |
| **2** | Purpose and elements of communication |
| **3** | Internal communication |
| **4** | Close communication, Remote communication |
| **5** | Types of individual communication |
| **6** | Verbal and non-verbal communication, written communication |
| **7** | Technical communication |
| **8** | MIDTERM EXAM |
| **9** | Mass communication |
| **10** | Formal communication |
| **11** | Types of organizational communication |
| **12** | Communication efficiency |
| **13** | Persuasive communication |
| **14** | Communication failures and their consequences |
| **15** | Project-presentation, communication applications |
| **16,17** | FINAL EXAM |

| **Calculation of Course Workload** | | | |
| --- | --- | --- | --- |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 2 | 6 | 12 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 2 | 10 | 20 |
|  | **Total workload** | | **76** |
|  | **Total workload / 30** | | **2,5333333** |
|  | **Course ECTS Credit** | | **3** |

| **Evaluation** | |
| --- | --- |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Homework |  |
|  |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| --- | --- | --- |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **BEHAVIORAL SCIENCES** | 221311172 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

|  |  |
| --- | --- |
| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | To inform students about the basic concepts of behavioral sciences and to introduce them to the importance of behavior in their work and normal lives. |
| **Short Course Content** | Basic concepts related to Behavioral Sciences. Branches of science that fall within the scope of Behavioral Sciences. Behavioral sciences that contribute to the study of organizations. The place of behavioral sciences in practice. Behavioral Approaches. Individual Basic Model of Behavior. Needs as the root cause of behaviors. Plane of behavior. Status and role behaviors. The place and importance of social institutions in human behavior. Interpersonal communication. Groups. Culture. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To improve knowledge of the effects of society on our behavior | 9 | 1, 2, 5,11 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Anadolu University Press, Introduction to Behavioral Sciences- 2013-Eskişehir |
| **Supporting References** | Slides Prepared by the Instructor Regarding the Course Content, Lecture Notes |
| **Necessary Course Material** | Projection, Computer |

|  |  |
| --- | --- |
| **Course Schedule** | |
| **1** | Introduction of the course |
| **2** | Introduction to sociology |
| **3** | Introduction to Psychology |
| **4** | Emerging sociology and hypothetical approaches |
| **5** | Emerging sociological and hypothetical approaches |
| **6** | Motives and Emotions |
| **7** | Sensation and Perception |
| **8** | MIDTERM EXAM |
| **9** | Community and community structure, |
| **10** | Community life, Community groups, Family |
| **11** | Classification of communities |
| **12** | Learning & Culture |
| **13** | Personality Psychology and Personality Theories |
| **14** | Social Influences on Behavior, Attitudes |
| **15** | Social Influences on Behavior, Attitudes |
| **16,17** | FINAL EXAM |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 2 | 8 | 16 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 2 | 8 | 16 |
|  | **Total workload** | | **76** |
|  | **Total workload / 30** | | **2,533333** |
|  | **Course ECTS Credit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
|  |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **TURKISH LANGUAGE II** | 221012005 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 2 | 0 | 2 | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To show the richness of Turkish by informing students about the development and current situation of Turkish, to gain a national language awareness, to ensure that they can speak and write Turkish correctly. To compare Turkish language with major languages in the world. To compare the language policies of major languages with the language policy of Turkish language. To give speech training. |
| **Short Course Content** | Definition and properties of language; languages of the world and the place of Turkish among the world languages; historical development of Turkish language and the development of Western Turkish; Atatürk's studies and views on Turkish language; phonetics; spelling rules and punctuation; language policies. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | provides the ability to communicate verbally. | 1,10 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | *Türk Dili I-II*, ed. Ferruh Ağca, Eskişehir Osmangazi Üniversitesi Yayınları, 2022**.** |
| **Supporting References** | *Üniversiteler İçin Türk Dili*, Bayrak Yayınları, İstanbul, 1997. |
| **Necessary Course Material** |  |

|  |  |
| --- | --- |
| **Course Schedule** | |
| **1** | Elements of a Sentence |
| **2** | Elements of a Sentence |
| **3** | Sentence Types |
| **4** | Sentence Types |
| **5** | Punctuation Marks |
| **6** | Punctuation Marks |
| **7** | Punctuation Marks |
| **8** | Mid-Term Exam |
| **9** | Written Expression |
| **10** | Written Expression |
| **11** | Oral Expression |
| **12** | Oral Expression |
| **13** | Spelling Rules |
| **14** | Spelling Rules |
| **15** | Expression Disorders |
| **16,17** | Final Exam |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 4 | 4 | 16 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 2 | 2 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 2 | 2 |
| Studying for Final Exam | 1 | 4 | 4 |
|  | **Total workload** | | **56** |
|  | **Total workload / 30** | | **1,86** |
|  | **Course ECTS Credit** | | **2** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
|  |  |
|  |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

|  |  |  |
| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 2 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION II** | 221012001 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 2 | 0 | 2 | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
|  |  |  |  | X |

|  |  |  |
| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

|  |  |
| --- | --- |
| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | To help students grow up as individuals who understand the establishment of the Republic, Atatürk's principles and revolutions, and who understand and protect secular, democratic and contemporary values, starting from the days following the victory of the Turkish War of Independence and the Treaty of Lausanne. |
| **Short Course Content** | Mudanya Armistice Agreement, Abolition of the Sultanate, Lausanne Peace Treaty, Proclamation of the Republic, Abolition of the Caliphate, 1924 Constitution, Multi-Party Life Experience, Sheikh Sait Uprising, Other Reactions Against the Republic, Alphabet Reform, University Reform, History and Language Reform, Revolutions in the field of economy, socio-economic life and law, Domestic and foreign politics followed during the Atatürk period, Atatürk's Principles, Developments in Turkey and the world after Atatürk's death |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Learns the Mudanya Armistice Agreement and Lausanne Peace Treaty in detail | 1,10 | 1 | A,K |
| **2** | Learns the political changes such as the abolition of the Sultanate, the proclamation of the Republic, the abolition of the Caliphate, etc. | 1,10 | 1 | A,K |
| **3** | Understands the attempts made to transition to multi-party political life during the Atatürk period | 1,10 | 1 | A,K |
| **4** | Recognizes the revolutions made in the field of law and education in order to establish a secular and modern social structure in Turkey | 1,10 | 1 | A,K |
| **5** | Learns the revolutions in economic and social life | 1,10 | 1 | A,K |
| **6** | Understands the developments in Turkish foreign policy during the Atatürk period | 1,10 | 1 | A,K |
| **7** | Learns the six principles that form the basis of Kemalist thought system in detail and comprehends their importance | 1,10 | 1 | A,K |
| **8** | Learns the complementary principles of Kemalist thought system | 1,10 | 1 | A,K |
| **9** | Learns the domestic and foreign developments during İsmet İnönü period | 1,10 | 1 | A,K |

|  |  |
| --- | --- |
| **Main Textbook** | Turan Şerafettin, Türk Devrim Tarihi, C.I-II, İstanbul, 1991–1995 |
| **Supporting References** | Ateş, Toktamış, Türk Devrim Tarihi, İstanbul: Der Yayınları, 2001.  Aybars, Ergün, Türkiye Cumhuriyeti Tarihi, İzmir: Ercan Kitabevi, 2000.  Eroğlu, Hamza, Türk İnkılap Tarihi, Ankara: Savaş Yayınları, 1990.  Kongar, Emre, Devrim Tarihi ve Toplumbilim Açısından Atatürk, İstanbul: Remzi Kitabevi, 1999.  Selek, Sebahattin, Anadolu İhtilali, İstanbul: Kastaç Yayınları, 1987.  Timur, Taner, Türk Devrimi ve Sonrası, Ankara: İmge Kitabevi, 1997. |
| **Necessary Course Material** |  |

|  |  |
| --- | --- |
| **Course Schedule** | |
| **1** | Mudanya Ceasefire Agreement; Abolition of the Sultanate and the Lausanne Peace Treaty |
| **2** | Proclamation of the Republic and Abolition of the Caliphate |
| **3** | Efforts to move to multi-party life; Izmir Assassination and Menemen Incident |
| **4** | Revolutions in the Field of Law: The Constitutions of the New Turkish State |
| **5** | Revolutions in the Field of Law: Adoption of the Civil Code and Regulations on Women's Rights |
| **6** | Innovations in the Field of Education and Culture: The Law on Education, the adoption of Latin Letters, changes made in language-history and other fields |
| **7** | Innovations Concerning Economic Life: Abolition of tithe tax, innovations in agriculture and industry, statism |
| **8** | Mid-Term Exam |
| **9** | Innovations in Social Life: Dress Revolution, Closure of Lodges and Lodges, Surname Law, Weekend |
| **10** | Turkish Foreign Policy in the Atatürk Period: Etabli Problem, Mosul Problem, Relations with Foreign States |
| **11** | Turkish Foreign Policy in the Atatürk Era: Membership in the League of Nations, Balkan Pact, Montreux Straits Convention, Sadabad Pact |
| **12** | Atatürk's Principles: Republicanism, Secularism, Revolutionism, Nationalism, Populism, Statism |
| **13** | Integral Principles of the Kemalist Thought System |
| **14** | Developments in domestic and foreign politics during the İsmet İnönü Period |
| **15** | Democratic Party Era |
| **16,17** | Final Exam |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 8 | 8 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 8 | 8 |
|  | **Total workload** | | **60** |
|  | **Total workload / 30** | | **2** |
|  | **Course ECTS Credit** | | **2** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

|  |  |  |
| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| ENGLISH II | 221012006 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| English | Associate degree | Compulsory |

|  |  |
| --- | --- |
| **Prerequisite(s) if any** | NONE |
| **Objectives of the Course** | Students can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. They can describe in simple terms aspects of their background, immediate environment and matters in areas of immediate need.  Students can understand standard speech related to areas of most immediate personal relevance (e.g. personal and family information, shopping, local geography and employment) and can catch the main point in simple messages and announcements.  Students can read and find specific, predictable information in simple everyday material such as advertisements, prospectuses and timetables.  Students can handle very short social exchanges, even though they cannot usually keep the conversation going of their own accord.  They can write relating to matters in areas of immediate need, linking a series of phrases and sentences with connectors. |
| **Short Course Content** | The aim of the course is to teach students basic grammar rules in elementary level, give them speaking, writing, reading and listening knowledge of English. It consists of content and activities aimed at having students acquire Elementary Level English language skills according to evaluation and reference system of The Common European Framework. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Learning Outcomes of the Course** | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| To be able to communicate orally and in writing in English. | 1,10 | 1, 4, 5, 11 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Warwick L., Williams D. (2020). *Roadmap A2 Students’ Book & Workbook*. Pearson Education Limited. |
| **Supporting References** | Murphy, R., (2004). *English Grammar in Use*, Cambridge University Press, |
| **Necessary Course Material** | Computer, Webcam, Speakers; or Smart phone |

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| **Course Schedule** | |
| **1** | 6A past simple (regular verbs) - prepositions - describe an event - understand reviews - understanding adjectives  6B past simple (irregular verbs) - describe a good weekend - understand a narrative - understanding the order of events |
| **2** | 6C past simple (questions) - verbs + prepositions - did you? - ask and answer questions - write a short story - using subject pronouns  6D give and accept an apology |
| **3** | 7A countable and uncountable nouns; some, any, lots of and a lot of - food and drink - vowel sounds; connected speech - describe food shopping items - understand announcements - listening for special information |
| **4** | 7B how much/how many? + quantifiers – food containers - sentence stress - create a dish - write a social media post - giving opinions and reasons |
| **5** | 7C comparative adjectives - describing places to eat - compare places to eat - follow instructions - understanding instructions  7D order in a café |
| **6** | 8A present continuous - geography -ing - describe a travel experience - write a guide - using adjectives  8B present simple and present continuous - weather - contractions - describe the weather - understand a news report - understanding connected speech |
| **7** | 8C superlative adjectives - phrases describing travel - compare places, activities and transport - understand a short article - understanding paragraph topics  8D make a phone call |
| **8** | Mid-Term Exam |
| **9** | 9A should/shouldn’t - health - give advice - understand a short talk - dealing with unknown words |
| **10** | 9B be going to - future plans - discuss your goals for the future - write an informal email - organising an email to a friend |
| **11** | 9C would like/want - activities with go - tonic stress; weak forms - describe what you want to do - understand a blog post - understanding because and so  9D make arrangements and invitations |
| **12** | 10A verb patterns - housework - sentence stress - interview people - write a personal profile - expressing likes and dislikes |
| **13** | 10B have to/don’t have to - clothes - word stress; have to - play a guessing game - understand an opinion article - identifying opinions |
| **14** | 10C present perfect simple - technology - contractions - talk about past experiences - understand an interview  - understanding time expressions 10D give a compliment |
| **15** | |
| **15,16** | Final Exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework | 1 | 2 | 2 |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 2 | 2 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 2 | 2 |
| Studying for Final Exam | 1 | 6 | 6 |
|  | **Total workload** | | **72** |
| **Total workload / 30** | | **2,4** |
| **Course ECTS Credit** | | **2** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM**  **OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **CALCULUS II** | 221312305 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** | No |
| **Objectives of the Course** | Being able to operate with vectors. Understanding the concept of limit and continuity. Being able to use derivatives and integrals to solve problems. |
| **Short Course Content** | Vectors, complex numbers, matrices, derivatives and their applications, integrals and their applications. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Makes quantity and discovery operations and can organise progress payments. | 1,4,10 | 1, 5, 8, 10,11 | A |

|  |  |
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| **Main Textbook** | 1. Anadolu Üniversitesi Yayınları Genel Matematik. Eskişehir  2. Görgülü., A. (2000) Genel Matematik. Eskişehir  3. Şenel, M. , Orhun N. , Tüzemen Ş. ( 2003) Genel Matematik. Eskişehir  4. Yıldız E. (2004) Genel Matematik. Trabzon  5. Argün Z. (2001) Temel Matematik. Ankara : Seçkin Yayınevi |
| **Supporting References** |  |
| **Necessary Course Material** | Square square, protractor, compass and calculator. |

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| **Course Schedule** | |
| **1** | Vectors |
| **2** | Vectors |
| **3** | Definition of complex numbers, vector representation, four operations of complex numbers in Cartesian form |
| **4** | Polar and Cartesian transformations of complex numbers |
| **5** | Polar and Cartesian transformations of complex numbers |
| **6** | Matrices |
| **7** | Matrices |
| **8** | Midterm |
| **9** | Derivatives and applications |
| **10** | Derivatives and applications |
| **11** | Derivatives and applications |
| **12** | Integration and its applications |
| **13** | Integration and its applications |
| **14** | Integration and its applications |
| **15** | Integration and its applications |
| **16,17** | Final Exams |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 14 | 1 | 14 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 2 | 5 | 10 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 2 | 6 | 12 |
|  | **Total workload** | | **80** |
|  | **Total workload / 30** | | **2,666666667** |
|  | **Course ECTS Credit** | | **3** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 5 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 1 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 1 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **STATİC STRUCTURE** | 221312122 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 2 | 2 | 3 | 5 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To give detailed information about support types and section force diagrams of isostatic systems. |
| **Short Course Content** | Load-bearing systems, properties of support types (fixed, movable and built-in), section force diagrams of simple beams and cantilever beams under the influence of single, uniform and triangular distributed loads, Isostatic frames. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to distinguish carrier system types. | 1,7 | 1,5 | A |
| **2** | To be able to distinguish load types. | 1,7 | 1,5 | A |
| **3** | To be able to draw axial force, shear force and moment diagrams of isostatic systems | 1,2 | 1,5 | A |

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| **Main Textbook** | Karaduman, M., Duran, Ş., 2009, Building Statics 1-2. |
| **Supporting References** | Lecture notes compiled from various sources |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Definitions and unit systems |
| **2** | Building systems (Two- and three-dimensional cages, beam and frame type structures). |
| **3** | Building element classes. |
| **4** | Load and force classes. |
| **5** | Balance equations. |
| **6** | Support types. |
| **7** | Beam types and definitions. |
| **8** | Mid-Term Exam |
| **9** | Internal forces and internal force distribution. |
| **10** | Internal forces and internal force distribution. |
| **11** | Isostatic structures and mechanisms |
| **12** | isostatic structures |
| **13** | Isostatic frames |
| **14** | Section force diagrams of isostatic frames |
| **15** | Section force diagrams of isostatic frames |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 5 | 60 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 16 | 16 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 16 | 16 |
|  | **Total workload** | | **150** |
|  | **Total workload / 30** | | **5** |
|  | **CourseECTSCredit** | | **5** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **COMPUTER AIDED DRAWING I** | 221312301 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 1 | 2 | 2 | 3 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To give information about the two-dimensional working platform, to introduce and apply the CAD commands necessary for drawing on the two-dimensional platform |
| **Short Course Content** | Basic CAD concepts, Two-dimensional working platform, CAD commands and applications, preparation of the output of the drawings created on the two-dimensional platform |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To learn a CAD program to prepare two-dimensional drawings. | 1,2,8,10 | 1,5,6 | A |
| **2** | To be able to draw the necessary drawings for the preparation of architectural and static projects of buildings both manually and in computer environment. | 1,2,8,10 | 1,5,6 | A |
| **3** | Can make technical drawings related to the field using a CAD platform. | 2,8 | 1,5,6 | A |
| **4** | Prepare the printouts of technical drawings. | 8 | 1,5,6 | A |

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| --- | --- |
| **Main Textbook** | Lecture Notes |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Basic Concepts |
| **2** | Two-dimensional work platform |
| **3** | Snap, line, polyline, copy, move |
| **4** | Sample drawings |
| **5** | Rectangle, polygon, circle, arc, |
| **6** | Chamfer, fillet |
| **7** | Sample drawings |
| **8** | Midterm exam |
| **9** | Rotate, trim, mirror, offset, |
| **10** | Explode, join, boundery, array |
| **11** | Ellipse, scale, stretch, |
| **12** | Hatch, extend, Block modüle |
| **13** | Dimensioning drawings (linear, alligned, angular dimension, radius, diameter, center mark) |
| **14** | Layers, pdf and output settings |
| **15** | Sample drawings |
| **16,17** | Final exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **CONCRETE TECHNOLOGY** | 221312302 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 2 | 2 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The main goal of the course is to provide students with the ability to calculate concrete mixtures using concrete and its components, cement, aggregates, water and additives, and to produce solutions and ideas for problems that may be encountered in practice. |
| **Short Course Content** | Concrete as a building material, portland cements and other cement types, aggregates, water, concrete additives, ready-mixed concrete, mixture calculation **,** properties of fresh concrete, production, transportation, placement, compaction, correction, curing of concrete, mechanical and physical properties of concrete, durability, ceramic materials and masonry walls, heat and moisture events in buildings |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To teach concrete and its components: cements, aggregates, water and additives. | 7,10 | 1,5 | A |
| **2** | To introduce ready-mixed concrete, to have the mixture calculated, to explain the properties of fresh concrete, its production, transportation, placement, compaction, correction and how to cure the concrete. | 6,7,10 | 1,5 | A |
| **3** | To provide information about the mechanical, physical properties and durability of concrete. | 6,7,10 | 1,5 | A |
| **4** | Introducing other building materials | 6,7,10 | 1,5 | A |

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| **Main Textbook** | Concrete, Prof. Dr. Turhan Y. Erdoğan, METU Development Foundation Publishing, 2003. |
| **Supporting References** | 1. Concrete, Prof. Dr. Turhan Y. Erdoğan, METU Development Foundation Publishing, 2003. 2. Building Materials, Prof. Dr. Süheyl Akman, I.T.Ü. Const. Fak. Publication, 1987. 3. Materials Science and Building Physics Problems, Assoc.Prof.Dr. Murat Eriç, Volume 1, Maket K. Yay., Istanbul, 1982. 4. Building Materials Lessons, Prof. Bekir Postacıoğlu, I.T.Ü. Printing House, 1975. 5. Building Materials Lessons, Prof. Dr. Ferruh Kocataşkın, I.T.Ü. Publications, no. 93, 1973. 6. Building Materials Science, Prof. Dr. Ferruh Kocataşkın, Arpaz Printing, Istanbul, 1975. 7. Building Materials II, Prof. Dr. Bülent Baradan, Dokuz Eylül Univ. Publications, 1996. 8. Beton, Volume 1, Prof. Bekir Postacıoğlu, Printing Technicians Printing House, 1986, Istanbul. 9. Beton, Volume 2, Prof. Bekir Postacıoğlu, Printing Technicians Printing House, 1987, Istanbul. 10. Concrete Seminar, DSI Publications, 1984. 11. Concrete, Necat Cilasun, STFA İnşaat A.Ş. Publications, no. 21, Istanbul, 1982. 12. Introduction to Concrete Technology, Prof. Dr. Süheyl Akman, İ.T.Ü., August 1994. 13. Concrete and Tests, Ömer Lütfü Beyazıt, DSİ. Publications, 1988. 14. Concrete Tests Handbook, Hasan Fehmi Albayrak, DSI. Publications, 1985. 15. Cements, Aggregates, Mixture and Maintenance Waters, Prof. Dr. Turhan Erdoğan, THBB Publications. 16. Concrete, S. Mindess and J. F. Young, Prentice-Hall, Inc., 1981. 17. Concrete, PK Mehta and PJM Monteiro, Prentice Hall, Englewood Cliffs, New Jersey 07632. 18. Properties of Concrete, A. M. Neville, Pitman Publishing Limited, 1978.   Design and Control of Concrete Mixtures, SH Kosmatka and WC Panarese, PCA, 1988. |
| **Necessary Course Material** | - |

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| --- | --- |
| **Course Schedule** | |
| **1** | Concrete as a building material |
| **2** | Portland cements and other types of cement |
| **3** | Aggregates |
| **4** | Water, concrete additives, |
| **5** | Ready mixed concrete, mix calculation |
| **6** | Properties of fresh concrete |
| **7** | Production |
| **8** | Mid-Term Exam |
| **9** | Transport, placement, compaction, smoothing and curing of concrete |
| **10** | Transport, placement, compaction, smoothing and curing of concrete |
| **11** | Mechanical and physical properties of concrete |
| **12** | Mechanical and physical properties of concrete |
| **13** | Durability |
| **14** | Ceramic materials and masonry walls |
| **15** | Heat and humidity events in buildings |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 7 | 7 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 7 | 7 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 4 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 5 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING TECHNOLOGY II** | 221312307 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To introduce dilatation joints, where and why they are made, insulation and insulation types, machines used in earthworks and ground improvement methods, simple excavation and transport calculations, construction machinery efficiency calculations, traditional and advanced construction methods such as cast-in-place reinforced concrete, prefabricated and steel structures and their comparison, temporary works such as formwork and scaffolding. |
| **Short Course Content** | Dilatation joints and their properties: insulation, insulation types and insulation materials: earthworks machinery and ground improvement methods used in earthworks: simple excavation and transport calculations: construction machinery efficiency calculations: traditional and advanced construction methods and their comparison: Temporary structures such as formwork and scaffolding. |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to comprehend dilatation joints, where and why they are made. | 1,5,10 | 1,5 | A |
| **2** | To be able to comprehend insulation, insulation types (insulation against heat, sound, water and moisture) and insulation materials. | 1,5,10 | 1,5 | A |
| **3** | To be able to comprehend the machines used in earthworks and soil improvement methods, to be able to make simple excavation and transport calculations, to be able to make work machines efficiency calculations. | 1,5,10 | 1,5 | A |
| **4** | To be able to compare traditional and advanced construction methods such as cast-in-place reinforced concrete, prefabricated and steel structures. | 1,5,10 | 1,5 | A |
| **5** | To be able to comprehend temporary works such as formwork and scaffolding. | 1,5,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Güner, M. S., Yüksel A., (2001), Yapı Teknolojisi I-II, İstanbul, Aktif Yayınevi. |
| **Supporting References** | 1. Özdemir, İ., (2005), Yapı Elemanları Ders Notları, Eskişehir, ESOGU,  2. Özdemir, İ., (2005), Yapı Makineleri Ders Notları, Eskişehir, ESOGU Basımevi |
| **Necessary Course Material** | Projector, Computer, blackboard |

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| **Course Schedule** | |
| **1** | Dilatation joints and their properties |
| **2** | Dilatation joints and their properties |
| **3** | Insulation, insulation types and insulation materials |
| **4** | Insulation, insulation types and insulation materials |
| **5** | Introduction of construction machinery used in earthworks |
| **6** | Construction machinery used in earthworks and soil improvement methods |
| **7** | Construction machinery used in earthworks and soil improvement methods |
| **8** | Midterm exam |
| **9** | Simple excavation works and construction equipment efficiency calculations |
| **10** | Simple excavation works and construction equipment efficiency calculations |
| **11** | Traditional and advanced construction methods and their comparison |
| **12** | Traditional and advanced construction methods and their comparison |
| **13** | Temporary structures such as formwork and scaffolding |
| **14** | Temporary structures such as formwork and scaffolding |
| **15** | Building samples |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **SURVEING** | 221312306 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to convert angle measurement units, to comprehend scale types, to calculate slope |
| **Short Course Content** | Units of measurement, scales, measurement errors, elevation curves, finding height, basic homework, polygons, area volume calculations, zoning information |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to make slope and section applications on topography maps | 3 | 1,5 | A |
| **2** | Understanding measurements | 3 | 1,5 | A |
| **3** | To be able to comprehend area calculations | 1,3,10 | 1,5 | A |
| **4** | Ability to perform basic assignments and conversions | 1,3,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Cemal Songu Surveying 2009  Inal, C., Erdi A., Yildiz F. Tapography Surveying Knowledge, 2011  Asri İ., Bayrak T., Surveying Information for Civil Engineers Lecture Notes Gümüşhane University, 2011. |
| **Supporting References** | - |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Introduction to topography |
| **2** | Angle measurement units |
| **3** | Scales |
| **4** | Measurement errors |
| **5** | Introduction of simple measuring instruments |
| **6** | Mapping and area calculations using simple measuring instruments |
| **7** | Sample Applications |
| **8** | Midterm exam |
| **9** | Perpendicular coordinate system |
| **10** | Basic assignments |
| **11** | Basic assignments |
| **12** | Volume calculations |
| **13** | Building operations |
| **14** | Enlargement and reduction of plans |
| **15** | Sample Applications |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **Course ECTS Credit** | | **3** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 5 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 3 |
| **8** | Uses professional package programs. | 4 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **ZONING LAW** | 221312303 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The main purpose of this course is to provide accurate information about the municipal legislation required for the evaluation of zoning and construction projects. |
| **Short Course Content** | To inform about the compliance of zoning and construction projects with the legislation |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To have knowledge of legislation about zoning and construction projects. | 1,2,7,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Zoning law and lecture notes |
| **Supporting References** | Lecture notes |
| **Necessary Course Material** | Projection |

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| --- | --- |
| **Course Schedule** | |
| **1** | Introduction, basic concepts of building legislation, zoning legislation and municipal legislation |
| **2** | Basic laws regarding building |
| **3** | Basic laws regarding zoning legislation: Zoning Law |
| **4** | Zoning Law implementation regulations: Plan Making Regulation, Land and Land Arrangement Regulation |
| **5** | Parking, shelter, heat regulations |
| **6** | Application examples of the regulations |
| **7** | Application examples of the regulations |
| **8** | Mid-Term Exam |
| **9** | Basic laws regarding zoning legislation: Coastal Law, Cultural and Natural Assets Protection Law |
| **10** | Expropriation Law |
| **11** | Expropriation Law |
| **12** | Urban Transformation, Legal Underpinnings |
| **13** | Municipality Law, Metropolitan Municipality Law |
| **14** | Building inspection legislation |
| **15** | Examples of building inspection legislation |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **CourseECTSCredit** | | **3** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING INSPECTION** | 221312309 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 3 | 0 | 3 | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To educate individuals who are knowledgeable about inspection by being informed about the content of the building inspection law. |
| **Short Course Content** | Informing students about inspection by providing information about the Building Inspection law. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Teaching what needs to be done about building inspection | 1,7,10 | 1,5 | A |
| **2** | To inform about building inspection and to provide information about institutions | 1,7 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Building control law, lecture notes |
| **Supporting References** | Lecture notes |
| **Necessary Course Material** | Projection |

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| **Course Schedule** | |
| **1** | Building Inspection Law No. 4708 |
| **2** | Building Inspection Law No. 4708 |
| **3** | Building Inspection Law No. 4708 |
| **4** | Building Control Law No. 4708 Implementation Regulation |
| **5** | Building Control Law No. 4708 Implementation Regulation |
| **6** | Building Control Law No. 4708 Implementation Regulation |
| **7** | Building Inspection Law Building Inspection Companies section |
| **8** | Mid-Term Exam |
| **9** | Building Inspection Law Building Inspection Companies section |
| **10** | Building Inspection Law Building Inspection Companies section |
| **11** | Building Inspection Law Public Works section |
| **12** | Building Inspection Law Public Works section |
| **13** | Building Inspection Law Public Works section |
| **14** | Building Inspection Law Municipalities section |
| **15** | Building Inspection Law Municipalities section |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **CourseECTSCredit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

| **Course Name** | **Course Code** |
| --- | --- |
| BUSINESS ETHICS | 221312304 |

| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| --- | --- | --- | --- | --- |
| **Theory** | **Practice** |
| 2 | 2 | 0 | 2 | 3 |

| **Course Category (Credit)** | | | | |
| --- | --- | --- | --- | --- |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
|  |  |  |  | X |

| **Course Language** | **Course Level** | **Course Type** |
| --- | --- | --- |
| Turkish | Associate degree | Elective |

| **Prerequisite(s) if any** | NONE |
| --- | --- |
| **Objectives of the Course** | The aim of this course is to teach to gain competencies related to professional ethics. |
| **Short Course Content** | To examine the concepts of ethics and morality, to examine the factors that play a role in the formation of morality, to examine professional ethics and to examine the concept of social responsibility |

| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| --- | --- | --- | --- | --- |
| **1** | Examines the concepts of ethics and morality | PÇ7  PÇ9 | 1, 5, 8,12,13 | A |
| **2** | Complies with the principles of professional ethics | PÇ7  PÇ9 | 1, 5, 8,12,13 | A |

| **Main Textbook** | Anadolu Üniversitesi Yayınları İş Etiği. Eskişehir |
| --- | --- |
| **Supporting References** |  |
| **Necessary Course Material** | Projector |

| **Course Schedule** | |
| --- | --- |
| **1** | Examine the concepts of ethics and morality |
| **2** | Examine the concepts of ethics and morality |
| **3** | Examine the ethical systems |
| **4** | Examine the ethical systems, investigate the factors that play a role in the formation of morality |
| **5** | Investigate the factors that play a role in the formation of morality |
| **6** | Examine the ethics of profession |
| **7** | Examine the ethics of profession |
| **8** | Mid-term exam |
| **9** | Examine the ethics of profession |
| **10** | Examine the ethics of profession |
| **11** | Analyzing the results of corruption and unethical behavior in professional life Professional |
| **12** | Analyzing the results of corruption and unethical behavior in professional life Professional |
| **13** | Examine the concept of social responsibility |
| **14** | Examine the concept of social responsibility |
| **15** | Examine the concept of social responsibility |
| **16,17** | Final exam |

| **Calculation of Course Workload** | | | |
| --- | --- | --- | --- |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 1 | 6 | 6 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 14 | 1,5 | 21 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 14 | 1,5 | 21 |
|  | **Total workload** | | **78** |
|  | **Total workload / 30** | | **2,6** |
|  | **Course ECTS Credit** | | **3** |

| **Evaluation** | |
| --- | --- |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| --- | --- | --- |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 3 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **CAREER PLANNING** | 221312308 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 2 | 2 | 0 | 2 | 3 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Undergraduate | Elective |

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| --- | --- |
| **Prerequisite(s) if any** | No |
| **Objectives of the Course** | This course aims to help students plan their own careers. |
| **Short Course Content** | Career-related concepts, Career planning, Stages of the career planning process, Career planning models, CV writing, Job interview |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Creates the ability to create and implement a business plan | 5,9 | 1,2,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Öz Temel, K. (2020). Career planning and development |
| **Supporting References** |  |
| **Necessary Course Material** | Computer and projector |

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| **Course Schedule** | |
| **1** | Career-related concepts |
| **2** | Career development theories |
| **3** | What is career planning? What are its features and principles? |
| **4** | Stages of the career planning process |
| **5** | Stages of the career planning process |
| **6** | Career planning models Goal setting in career planning |
| **7** | World career trends |
| **8** | Midterm |
| **9** | CV preparation |
| **10** | Resume types, CV format and examples, points to consider when preparing a CV |
| **11** | Cover letter Reference letter |
| **12** | Job interview purposes, methods and types |
| **13** | Preparation for the interview and interview stages |
| **14** | Situations that may be encountered during interviews; question types, body language-bodily signs |
| **15** | Situations that may be encountered during interviews; question types, body language-bodily signs |
| **16,17** | Final Exams |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 2 | 2 | 4 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 14 | 1,5 | 21 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 14 | 1,5 | 21 |
|  | **Toplam iş yükü** | | **76** |
|  | **Toplam iş yükü / 30** | | **2,53** |
|  | **Dersin AKTS Kredisi** | | **3** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 4 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 2 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **BUILDING ARCHITECTURE AND DETAIL DRAWINGS** | 221313123 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 2 | 2 | 3 | 5 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to draw various architectural point and system details (flooring, stairs, roof, etc.) in which the properties and structure of the building elements are expressed in detail and to comprehend the principles of the application of these building elements and systems by supporting them with the necessary technical information. |
| **Short Course Content** | Basic Shapes, Plan, Section, Appearance drawings, Detail drawings |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to recognise architectural drawings | 1,2,7,8,10 | 1,6 | A |
| **2** | To be able to prepare plan, section, elevation and detail drawings. | 2,8 | 1,6 | A |

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| --- | --- |
| **Main Textbook** | Uzuner, B., A., Introduction to Foundation Engineering (Derya Kitabevi) |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Basic Information |
| **2** | Detailed information about zoning regulations and architectural conditions |
| **3** | Application sketch processing in package programme |
| **4** | Zoning status processing in package programme |
| **5** | Drafting the floor plan, creation of walls |
| **6** | Drafting floor plan, door, window drawing |
| **7** | Drafting floor plan, furnishings, drawing details of the space |
| **8** | Midterm exam |
| **9** | Ground floor drawing |
| **10** | Basement floor plan drawing |
| **11** | Roof detail drawing |
| **12** | Architectural section detail drawing, side view drawing |
| **13** | Architectural section detail drawing, front view drawing |
| **14** | Site plan drawing |
| **15** | Sample application |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 3 | 36 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 30 | 30 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 30 | 30 |
|  | **Total workload** | | **154** |
|  | **Total workload / 30** | | **5** |
|  | **Course ECTS Credit** | | **5** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 4 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **OCCUPATIONAL HEALTH AND SAFETY** | 221313136 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 2 | 0 | 2 | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To provide those who have acquired the profession of construction technician with the awareness of Occupational and Worker Health within the professional ethics during the periods when they enter the profession and apply the managerial life and responsibilities in the profession, and to define, introduce and communicate their responsibilities and duties in accordance with the legislation. |
| **Short Course Content** | Regulation of Occupational Health and workplace working conditions, Occupational Safety Principles, worker working conditions, rules, facilities and elements (PPEs) in construction workplaces and construction sites, legal and administrative Occupational Health and Safety personal, institutional and organizational management principles. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | The course is explained theoretically with pp reflections and presentations; It is aimed to explain, exemplify and evaluate the legal, managerial, professional principles, ethics and principles of working life, environmental protection, occupational health and safety tools, equipment, rules and legislation from the perspective and window of construction technician. | 7,9 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | All books, lecture notes, Law Texts, Regulations, Statutes, Case Laws, Rulings, legislation and writings related to the course are the main resources. |
| **Supporting References** | Practical, exemplary, corporate, personal books, lecture notes, directives, regulations, statutes, specifications, printed and written legislation on all other subjects are valid. |
| **Necessary Course Material** | Laptop, Datashow (data projection devices), Fixed or movable white screen, blackboard for written applications. |

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| **Course Schedule** | |
| **1** | Introduction, general introduction of Occupational Health and Safety, Work Accidents, Occupational Diseases |
| **2** | Development of Occupational Health and Safety in the world and in Türkiye |
| **3** | Legal dimension and duties, powers and responsibilities in occupational health and safety in Türkiye |
| **4** | Occupational Safety promotion, Risks in buildings and other construction style working environments |
| **5** | Working at Height, its dangers, protection methods, features and conditions |
| **6** | Places and types of falls, their shapes, precautions to be taken against falls, tools and equipment |
| **7** | Places and types of falls, their shapes, precautions to be taken against falls, tools and equipment |
| **8** | Mid-Term Exam |
| **9** | Types of accidents that result in crushing, squeezing, impact, soft tissue trauma |
| **10** | Workplace risks, working conditions, protection measures, equipment in construction and construction machinery,  Working conditions, risks and characteristics, protection in closed environments (such as galleries, wells, tunnels and corridors) |
| **11** | Use of explosives, working conditions and environment with pressure containers and tubes, features, protection |
| **12** | Occupational Health and Safety, Occupational Disease documents, rules and conditions in legal and administrative media |
| **13** | Demonstration of occupational health and safety measures on a sample construction site |
| **14** | Presentation and discussion of assignments |
| **15** | Presentation and discussion of assignments |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 10 | 4 | 40 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 10 | 10 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 10 | 10 |
|  | **Total workload** | | **90** |
|  | **Total workload / 30** | | **3** |
|  | **CourseECTSCredit** | | **3** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **CONCRETE I** | 221313132 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | 1.Material recognition  2.Understanding the behavior of concrete  3.Understanding the behavior of reinforced concrete elements  4.Knowledge of calculation and drawing principles of columns and beams  5.Knowledge of relevant Turkish Standards |
| **Short Course Content** | The aim of the course is to comprehend the behavior and design principles of reinforced concrete elements. Content: Cement, water, aggregate, concrete, mixing, maintenance, admixtures. Mechanical properties of concrete and reinforcing steel, Concrete and steel classes. Shrinkage, creep effect. Reinforced concrete behavior, Bearing capacity assumptions. Building safety. Reinforced concrete short columns and column types, importance of winding reinforcement, Minimum conditions (Turkish Standards). Reinforced concrete beams and beam types. Behavior of beams in simple bending, determination of bearing capacity, sizing. Minimum conditions. Shear strength and reinforcement. Axial compression and biaxial bending columns, sizing. |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | construction project | 1,2,7,8,10 | 1,5 | A |
| **2** | To be able to put the project into practice | 1,2,7,8,10 | 1,5 | A |
| **3** | Understanding theory and practice | 1,2,7,8,10 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | **1. Celep, Z. , (2009).**  Betonarme Yapılar, Beta dağıtım, İstanbul.  **2. Doğangün, A. (2008).**  Betonarme Yapıların Hesap ve Tasarımı, Birsen Yayınevi, İstanbul.  **3. Ersoy, U., Özcebe, G. (2004).** Betonarme, Evrim yayınevi, İstanbul.  **4. Ersoy, U., Özcebe, G., Tankut, T. (2003).** Reinforced Concrete, ODTÜ, Ankara. |
| **Supporting References** | **1. Aydın, M. R. (2002).** Betonarme Hesap Tabloları, Osmangazi Üniversitesi yayın No: 071, Eskişehir.  **2. Aydın, M. R., Akgün, Ö. R., Topçu, A.** **(2002).** Betonarme Kolon Tabloları, Eskişehir.  **3. Bakır, E., Bakır, A., R. (1986)**. Kolon ve Perde Donatı Tabloları, (Taşıma Gücü Yöntemi), Ankara.  **4. TS 498 (1997).** Yapı Elemanlarının Boyutlandırılmasında Alınacak Yüklerin Hesap Değerleri, TSE.  **5. TS ISO 9194 (1997).** Yapıların Projelendirilme Esasları-Taşıyıcı Olan ve Olmayan Elemanlar- Depolanmış malzemeler-Yoğunluk, TSE.  **6. TS 500 (2000).** Betonarme Yapıların Hesap ve Yapım Kuralları, Türk Standardları Enstitüsü.  **7**. Deprem Bölgelerinde Yapılacak Binalar Hakkında Yönetmelik, Bayındırlık Bakanlığı, 2007. Türkiye  8. **Deprem Bölgeleri Haritası, Yerleşim Birimleri ve Deprem Bölgeleri, Bayındırlık Bakanlığı, 1996.** |
| **Necessary Course Material** | Projector, Computer, Blackboard, |

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| **Course Schedule** | |
| **1** | Cement, water , aggregate, concrete mixture , care additives. |
| **2** | Mechanical properties of concrete and reinforcing steel , concrete and steel classes. Shrinkage , creep effect. |
| **3** | Reinforced behavior, Bearing capacity assumptions. |
| **4** | Reinforced behavior, Bearing capacity assumptions. |
| **5** | Building security. Reinforced concrete short columns and column types, the importance of hoops |
| **6** | Building security. Reinforced concrete short columns and column types, the importance of hoops |
| **7** | Minimum conditions ( Turkish Standards ) . |
| **8** | Mid-Term Examination |
| **9** | Reinforced concrete beams beam types. Behavior of simple bending beam |
| **10** | Determination of ultimate strength , sizing . |
| **11** | Determination of ultimate strength , sizing . |
| **12** | Minimum conditions. Shear strength and reinforcement . |
| **13** | Minimum conditions. Shear strength and reinforcement |
| **14** | Axial compression and biaxial Magadan running lean columns, resizing. |
| **15** | Axial compression and biaxial Magadan running lean columns, resizing |
| **16,17** | Cement, water , aggregate, concrete mixture , care additives. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 30 | 30 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 30 | 30 |
|  | **Total workload** | | **150** |
|  | **Total workload / 30** | | **5** |
|  | **Course ECTS Credit** | | **5** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 4 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **SOIL MECHANICS I** | 221313137 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 5 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to recognise the physical properties of soils and to classify them by different methods |
| **Short Course Content** | Physical properties and classification of soils, sampling and methods, general geology, formation and types of soils, permeability of soils |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to establish the relationship between structure and ground, | 1,2,5,9,10 | 1,3,5 | A |
| **2** | to understand the factors in the formation of soils, | 1,2,5,9,10 | 1,3,5 | A |
| **3** | to be able to establish a relationship between the structure of soils and bearing capacity | 1,2,5,9,10 | 1,3,5 | A |
| **4** | to be able to distinguish floor types | 1,2,5,9,10 | 1,3,5 | A |

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| **Main Textbook** | UZUNER BAYRAM ALİ 2007 Temel Zemin Mekaniği |
| **Supporting References** | Lecture notes compiled from various sources |
| **Necessary Course Material** | Projector, Computer, blackboard |

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| **Course Schedule** | |
| **1** | Introduction to soil mechanics |
| **2** | Geological structure of Turkey |
| **3** | Formation of soils |
| **4** | Basic physical properties of soils |
| **5** | Sample problem solutions |
| **6** | Relationships between basic physical properties |
| **7** | Relationships between basic physical properties |
| **8** | Midterm exam |
| **9** | Introduction to the classification of soils |
| **10** | Consistency limits |
| **11** | Consistency limits |
| **12** | Triangle classification |
| **13** | Combined soil classification types and sample problem solutions |
| **14** | Rock types and their relations with soil |
| **15** | Rock types and their relations with soil |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 30 | 30 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 30 | 30 |
|  | **Total workload** | | **150** |
|  | **Total workload / 30** | | **5** |
|  | **Course ECTS Credit** | | **5** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **STEEL STRUCTURES** | 221313134 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To give information about the behavior of steel bars under the influence of tension and pressure. |
| **Short Course Content** | Steel structural elements, profile types, tensile bars, pressure bars, riveted, bolted and welded joints of tensile and pressure bars |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Understanding the concept of safety stress. | 7 | 1,5 | A |
| **2** | To be able to control the tension of steel bars under the influence of tension and pressure. | 7,10 | 1,5 | A |
| **3** | To be able to control the tension of the joining means. | 1,7 | 1,5 | A |

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| **Main Textbook** | Karaduman, M., 2002, Steel Structures - Volume 1 |
| **Supporting References** | Lecture notes compiled from various sources |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Classification of steel structures |
| **2** | Loads in steel structures |
| **3** | Bolted and riveted connections |
| **4** | Welded connections |
| **5** | Tensile bars, Stress calculation in tensile members |
| **6** | Pressure elements, Stress calculation in pressure elements |
| **7** | Application: Stress calculation in Tensile and Compression members |
| **8** | Mid-Term Exam |
| **9** | Detail drawings of Tensile and Compression members |
| **10** | Riveted and bolted joints of flexural elements |
| **11** | Application: Riveted and bolted joints of flexural elements |
| **12** | steel roofs |
| **13** | Application: Solution of steel roof truss systems |
| **14** | Drawing of steel roof details |
| **15** | Drawing of joint details |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
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| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **OFFICE SITE AND ORGANIZATION** | 221313140 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | Knowing the definitions and explanations in the tender legislation, introducing the students to the project types, tender and contracts law, construction works specifications, making tenders, obtaining guarantees, applying for tenders, how to prepare the tender dossier, establishing a construction site, making a work schedule, public works control regulations. |
| **Short Course Content** | Definitions and explanations in the tender legislation, project definitions, preparation principles and reasons for need, tender law, contract draft, construction works specifications, preparation of the tender dossier, tender commissions, tender announcements, guarantees, tender procedures, results, contracts, construction site establishment, project, organization, construction site types, construction site layout planning, work programs, public works control regulations. |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Knowing the definitions and explanations in the tender legislation, understanding unit prices, unit price types, their scope and calculation of unit prices. | 7 | 1,5 | A |
| **2** | Understanding project types. | 1 | 1,5 | A |
| **3** | Understanding the tender and contracts law. | 10 | 1,5 | A |
| **4** | Ability to understand construction works specifications. | 7 | 1,5 | A |
| **5** | To understand how to conduct tenders, obtain guarantees, apply for tenders, and how to prepare the tender dossier. | 1,7 | 1,5 | A |
| **6** | Understanding tender procedures, results, contracts, construction site establishment, work schedules and relevant legislation. | 5,7 | 1,5 | A |
| **7** | Ability to plan the establishment of a construction site, determine construction site buildings, design construction site layout, recognize different construction sites. | 8,9,10 | 1,5 | A |

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| **Main Textbook** | Özdemir, İ., (2005), Construction Management Lecture Notes, Eskişehir, ESOGU Printing House |
| **Supporting References** | 1. Özdemir, İ., (2005), Construction Management and Construction Site Technique Lecture Notes, Eskişehir, ESOGU Printing House.  2. Beetroot farmer. A. Öcal ME, (1998), Construction Operations and Cost Accounts, |
| **Necessary Course Material** | Projector, Computer, Professional Software Programs, Whiteboard |

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| **Course Schedule** | |
| **1** | Definitions and explanations in the tender legislation |
| **2** | Project definitions, preparation principles and reasons for need |
| **3** | Public Procurement Law No. 4734 and Public Procurement Contracts Law No. 4735 |
| **4** | Public Procurement Law No. 4734 and Public Procurement Contracts Law No. 4735 |
| **5** | Construction Works Tenders Implementation Regulation |
| **6** | Preparation of tender dossier, tender commissions, tender announcements, guarantees, tender procedures, results, contracts |
| **7** | Preparation of tender dossier, tender commissions, tender announcements, guarantees, tender procedures, results, contracts |
| **8** | Mid-Term Exam |
| **9** | Preparation of work programs |
| **10** | Preparation of work programs |
| **11** | Contract drafts, General Specifications, Technical Specifications, Control Regulations |
| **12** | Contract drafts, General Specifications, Technical Specifications, Control Regulations |
| **13** | Project Management, construction site establishment and organization |
| **14** | Construction site planning, construction site layout, construction site types |
| **15** | construction site buildings |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | | |
| **Activities** | | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | | 12 | 4 | 48 |
| Homework | |  |  |  |
| QuizExam | |  |  |  |
| Studying for Quiz Exam | |  |  |  |
| Oral exam | |  |  |  |
| Studying for Oral Exam | |  |  |  |
| Report (Preparation and presentation time included) | |  |  |  |
| Project (Preparation and presentation time included) | |  |  |  |
| Presentation (Preparation time included) | |  |  |  |
| Mid-Term Exam | | 1 | 1 | 1 |
| Studying for Mid-Term Exam | | 1 | 14 | 14 |
| Final Exam | | 1 | 1 | 1 |
| Studying for Final Exam | | 1 | 14 | 14 |
|  | | **Total workload** | | **120** |
|  | | **Total workload / 30** | | **4** |
|  | | **CourseECTSCredit** | | **4** |
| **Evaluation** | | | | |
| **Activity Type** | **%** | | | |
| Mid-term | 40 | | | |
| Quiz |  | | | |
| Homework |  | | | |
|  |  | | | |
|  |  | | | |
| **Final Exam** | 60 | | | |
| **Total** | 100 | | | |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 5 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **HYDROMECHANİCAL** | 221313135 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The main purpose of this course is to know the properties of pressurized flow in pipes and the calculation of head losses, to solve pipeline systems, to calculate local changes on the water surface. |
| **Short Course Content** | Solution of pressurized flow in the pipe and pipeline systems, Open channel flows , Uniform Flow, Appropriate Cross-section Selection, Specific Energy, Hydraulic Jump |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To know the basic properties of pressurized flow in pipes. | 1,7 | 1,5 | A |
| **2** | Applying flow types and calculation principles in pipes . | 7 | 1,5 | A |
| **3** | To be able to classify the flows in open channels . | 10 | 1,5 | A |
| **4** | To be able to make uniform flow calculations. | 10 | 1,5 | A |

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| **Main Textbook** | BM Sümer, İ. Ünsal, M. Bayazıt, Hydraulics, Birsen Publishing House |
| **Supporting References** | - |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Flow in pipes |
| **2** | Current types |
| **3** | loss of energy |
| **4** | Local energy losses |
| **5** | Pipe and open channel hydraulics |
| **6** | Open channel hydraulics |
| **7** | Problem solutions |
| **8** | Mid-Term Exam |
| **9** | Calculation of uniform current |
| **10** | Calculation of uniform current |
| **11** | Most suitable cross section |
| **12** | specific energy |
| **13** | Local changes on the water surface |
| **14** | hydraulic jump |
| **15** | Cross-section reduction |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **DAMAGE DETECTION IN STRUCTURES** | 221313138 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To teach the types of damage that may occur in structures, their causes, types and how reinforcements are made. |
| **Short Course Content** | Causes of damage in buildings, types of damage, damage assessment studies, types of damage in reinforced concrete structures, types of damage in masonry structures |

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| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Being able to recognize structures and structure classes, | 1,7 | 1,5 | A |
| **2** | Being able to understand the underground works such as excavation, fortification, drainage and foundation, | 1,7 | 1,5 | A |
| **3** | Being able to understand above-ground works such as walls, wall types and knitting rules, chimneys, stairs and roofs, | 1,7 | 1,5 | A |
| **4** | Ability to understand coating with natural and artificial materials (interior and exterior plaster, whitewash, plastic and oil paint, tiles, tiles, wooden parquet, etc.) | 1,7 | 1,5 | A |

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| **Main Textbook** | Prof.Dr.Süheyl AKMAN, Building Damages and Repair Principles |
| **Supporting References** | Lecture notes |
| **Necessary Course Material** | computer and projector |

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| **Course Schedule** | |
| **1** | Causes of Damage in Buildings |
| **2** | Causes of Damage in Buildings |
| **3** | Types of Damage in Buildings |
| **4** | Procedures to be Taken in Detection of Damage in Buildings |
| **5** | Procedures to be Taken in Detection of Damage in Buildings |
| **6** | Damage types in Reinforced Concrete Structures |
| **7** | Damage types in Reinforced Concrete Structures |
| **8** | Mid-Term Exam |
| **9** | Cracks in concrete |
| **10** | Situations that cause cracking in concrete |
| **11** | Situations that cause cracking in concrete |
| **12** | Reinforced Concrete Frame Damages |
| **13** | Reinforced Concrete Frame Damages |
| **14** | Damage Forms in Masonry Structures |
| **15** | Principles of commissioning |
| **16,17** | Final Exam |

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| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 2 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 3 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **RESEARCH METHODS AND TECHNIQUES** | 221313131 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To ensure access to accurate information and appropriate use of information, to look at the data with a more perspective and questioning eye. To be able to present research data. |
| **Short Course Content** | Concepts related to scientific research. The necessity of scientific research. Scientific research and science ethics. Examples of resource use and citation. Research, report preparation, academic skills methods. Project selection, expectations. Project planning. Evaluation of existing research. Experimental design. Science ethics and scientific plagiarism. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Gaining the ability to conduct research | 1,7,9 | 1,2,14 | A,E |
| **2** | To be able to comprehend the rules of citation | 1,7 | 1,2,14 | A,E |
| **3** | To reach the right information and to gain the ability to analyze and synthesize the information received | 1,7,9,10 | 1,2,14 | A,E |
| **4** | Gaining the ability to present research | 1,7,9,10 | 1,2,14 | A,D |

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| **Main Textbook** | Prof.Dr. İsmail H. ALTAŞ lecture notes, KTU |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer, Blackboard, |

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| **Course Schedule** | |
| **1** | Introduction |
| **2** | Scientific research and types of knowledge |
| **3** | Scientific research |
| **4** | Objectives in research |
| **5** | Selecting a research topic |
| **6** | Source research |
| **7** | Preparing information forms |
| **8** | Midterm exam |
| **9** | Organization and analysis of data |
| **10** | Project work |
| **11** | Project writing |
| **12** | Support Programs |
| **13** | Writing and organizing bibliography |
| **14** | Report presentation |
| **15** | Report presentation |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 4 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **QUALITY MANAGEMENT SYSTEMS** | 221313139 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 3 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** | NO |
| **Objectives of the Course** | The aim of this course is to gain competencies related to quality assurance and standards in business life. |
| **Short Course Content** | The concept of quality, standard and standardization, the importance of the standard in the production and service sector, management quality and standards, quality costs, problem identification and solving tools in quality, quality management systems, strategic management, process and resource management system, control diagrams and distributions. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To establish the infrastructure of the quality management system. | 7 | 1,5,11,15 | A,D |
| **2** | Able to learn and apply Quality standards | 7 | 1,5,11,15 | A,D |

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| --- | --- |
| **Main Textbook** | 1.DİLSSIZ İ.,KARTAL C.S.,Quality Assurance and Standards, Detay Publishing, Ankara, 2012.  2.BURNAK N., Total Quality Management (Statistical Process Control), Osmangazi University Publications, Eskisehir, 1997. |
| **Supporting References** | Course Content Slides, Lecture Notes |
| **Necessary Course Material** | Projection, Computer |

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| **Course Schedule** | |
| **1** | Quality and basic concepts |
| **2** | Quality, quality control |
| **3** | Quality assurance, total quality management and the relationships between them |
| **4** | Quality costs |
| **5** | Standard and standardization |
| **6** | Certification and accreditation |
| **7** | Calibration and metrology |
| **8** | Midterm Exam |
| **9** | Quality management systems |
| **10** | Quality management systems |
| **11** | Quality management systems |
| **12** | Quality management systems |
| **13** | Quality problem identification and solving tools |
| **14** | Process and resource management system |
| **15** | Control Diagrams and distributions |
| **16,17** | Final exams |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **Course ECTS Credit** | | **4** |

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| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 30 |
| Homework | 20 |
|  |  |
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| **Final Exam** | 50 |
| **Total** | 100 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 2 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 1 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 1 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 1 |
| **5** | Can prepare and implement construction site work plans. | 1 |
| **6** | Can perform experiments on building materials. | 1 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 1 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 1 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **COMPUTER AIDED DRAWING II** | 221314123 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 1 | 2 | 2 | 2 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to draw and read static projects with the help of two-dimensional platform. |
| **Short Course Content** | Making project drawings with CAD commands, preparing pdf outputs |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To learn a CAD program to prepare two-dimensional drawings. | 1,2,8,10 | 1,5,6 | A |
| **2** | To be able to draw the necessary drawings for the preparation of architectural and static projects of buildings both manually and in computer environment. | 1,2,8,10 | 1,5,6 | A |
| **3** | Can make technical drawings related to the field using a CAD platform. | 2,8 | 1,5,6 | A |
| **4** | Prepare the printouts of technical drawings. | 8 | 1,5,6 | A |

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| **Main Textbook** | Lecture Notes |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Basic Concepts |
| **2** | Introduction to static project with the help of CAD program |
| **3** | Foundation plan drawing |
| **4** | Foundation plan drawing |
| **5** | Floor mold plan drawing |
| **6** | Floor mold plan drawing |
| **7** | Application |
| **8** | Midterm exam |
| **9** | Rebar reinforcement plan (Beam opening) |
| **10** | Rebar reinforcement plan (Beam opening) |
| **11** | Rebar reinforcement plan (Column opening) |
| **12** | Rebar reinforcement plan (Column opening) |
| **13** | Column application plan |
| **14** | Projection and view extraction |
| **15** | Application |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 2 | 4 | 8 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 4 | 4 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 4 | 4 |
|  | **Total workload** | | **60** |
|  | **Total workload / 30** | | **2** |
|  | **Course ECTS Credit** | | **2** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **FOUNDATION CONSTRUCTION** | 221314138 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 2 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
| ✓ | ✓ |  |  |  |

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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To recognize the foundation soil, to learn the experiments of interest, to be able to interpret experimental data, to learn the application methods of the solutions to be brought to the problems of foundation construction, |
| **Short Course Content** | Introduction to foundation engineering, Analysis of soil investigation methods, Lateral soil pressures and theories, Retaining structures and collapse types, Foundation types and sample problems, Settlement types in cohesive and cohesionless foundations. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | The importance of foundation engineering | 1,5,6,10 | 1,5 | A |
| **2** | Foundation design with field experiments | 6 | 1,5 | A |
| **3** | Single foundation, continuous foundation, raft foundation calculation and organization principles | 1,5,6,10 | 1,5 | A |
| **4** | Principles of pile foundation calculation and organization | 1,5,6,10 | 1,5 | A |
| **5** | Soil improvement methods | 5,6, | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Uzuner, B., A., Introduction to Foundation Engineering (Derya Kitabevi) |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Foundation engineering, Objectives of the course, Classification of foundations, |
| **2** | Soil investigation methods, Investigation pits, Drilling, Standard penetration test, Geophysical methods, Soil investigation report |
| **3** | Fracture in foundation soil, Theories of bearing capacity, Field tests, Bearing capacity tables |
| **4** | Rankine Theory, Coulomb Wedge Theory, Culmann Method, Example problems |
| **5** | Classification of retaining structures, retaining walls, bearing capacity analysis, overturning analysis, shear analysis |
| **6** | Classification of single foundations, Rigid acceptance method, Centrally loaded foundations, Eccentrically loaded foundations, Symmetric and asymmetric foundations, Cross-sectional influence diagrams |
| **7** | Single foundations Bearing capacity analysis, Shear analysis, Punching analysis, Flexural analysis, Example problems |
| **8** | Midterm exam |
| **9** | Continuous foundations |
| **10** | Raft foundations |
| **11** | Raft foundations |
| **12** | Pile foundations |
| **13** | Pile foundations |
| **14** | Foundation settlements cohesionless soil |
| **15** | Foundation settlements cohesive soil |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 1 | 4 | 4 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **64** |
|  | **Total workload / 30** | | **2** |
|  | **Course ECTS Credit** | | **2** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

|  |  |  |
| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 4 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 5 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **SOIL MECHANICS II** | 221314139 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to recognise compression, to calculate stress increases at certain depths, to calculate lateral pressures |
| **Short Course Content** | Compaction, stress distributions, water flows in the ground, lateral soil pressures, bearing capacity and settlements |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to comprehend compaction and consolidation | 1,2,5,9,10 | 1,3,5 | A |
| **2** | To be able to make stress calculations, to calculate the parameters related to soils | 1,2,5,9,10 | 1,3,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | UZUNER BAYRAM ALİ 2007 Temel Zemin Mekaniği |
| **Supporting References** | Lecture notes compiled from various sources |
| **Necessary Course Material** | Projector, Computer, blackboard, calculator |

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| **Course Schedule** | |
| **1** | Water currents in the ground |
| **2** | Sample problem solutions |
| **3** | Permeability of soils |
| **4** | Darcy's law |
| **5** | Compaction |
| **6** | Compaction |
| **7** | Consolidation |
| **8** | Midterm exam |
| **9** | Experiments |
| **10** | Experiments |
| **11** | Sample problem solutions |
| **12** | Stress distribution in the ground |
| **13** | Slope stability |
| **14** | Bearing capacity of soils |
| **15** | Lateral ground pressures |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **Course ECTS Credit** | | **4** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **CONCRETE II** | 221314132 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 5 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | 1.Recognizing building types  2.Learning the principles of structural system selection  3.Understanding flooring types  3.Learning flooring design and drawing  4.Recognize foundation types  5.Learning basic design and drawing  6.Use of relevant regulations |
| **Short Course Content** | The aim of the course is to comprehend the design principles of reinforced concrete structures. The content is as follows: Classification of structures. Structural system selection. Structural system irregularities. Slab types. Beamed slabs, one and two direction slabs, reinforcement calculation with TS500-2000 tables, hollow slabs, various supported and loaded slabs. Threaded slabs. Foundations, foundation types, under wall foundations, continuous foundations, raft foundations. |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | construction project | 1,2,7,8,10 | 1,5 | A |
| **2** | To be able to put the project into practice | 1,2,7,8,10 | 1,5 | A |
| **3** | Understanding theory and practice | 1,2,7,8,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | **1.Topçu, A., (2019).** Betonarme 1 ders notları.  **2.Celep, Z**., (2009). Betonarme Yapılar, Beta dağıtım, İstanbul.  **3.Doğangün, A.** (2008). Betonarme Yapıların Hesap ve Tasarımı, Birsen Yayınevi, İstanbul.  **4.Ersoy, U.** (1995). Betonarme 2, Döşeme ve Temeller, Evrim Yayınevi, İstanbul. |
| **Supporting References** | **1.Aydın, M. R.** (2002). Betonarme Hesap Tabloları, Osmangazi Üniversitesi yayın No: 071, Eskişehir.  **2.Çetmeli, E.** (1987). Plaklar, İTÜ, İstanbul.  **3.Köseoğlu, S**. (1986). Temeller, I, II, Matbaa Teknisyenleri Basımevi, İstanbul.  **4.Köseoğlu, S.** (1992). Merdivenler, Matbaa Teknisyenleri Basımevi, İstanbul.  **5.ATIMTAY, E.**, **ATIMTAY, E.**, Betonarme Sistemlerin Tasarımı (*genişletilmiş 2. baskı*), Cilt I, II, ODTÜ, 2001.  **6.ATIMTAY, E.**, Açıklamalar ve Örneklerle Afet Bölgelerinde Yapılacak Yapılar Hakkında Yönetmelik, Cilt I, II, ODTÜ, 2000.  7.TS 498-1997, Yapı Elemanlarının Boyutlandırılmasında Alınacak Yüklerin Hesap Değerleri, TSE, 1997.  8.TS ISO 9194-1997, Yapıların Projelendirilme Esasları-Taşıyıcı Olan ve Olmayan Elemanlar-Depolanmış Malzemeler-Yoğunluk, TSE, 1997.  9.TS 500-2000, Betonarme Yapıların Hesap ve Yapım Kuralları, Türk Standardları Enstitüsü, 2000.  10.Deprem Bölgelerinde Yapılacak Binalar Hakkında Yönetmelik, Bayındırlık Bakanlığı, 2007.  11.Deprem Bölgeleri Haritası, İndeks, Yerleşim Birimleri ve Deprem Bölgeleri, Bayındırlık Bakanlığı, 1996. |
| **Necessary Course Material** | Projector, Computer, Blackboard, |

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| **Course Schedule** | |
| **1** | Classification of structures. Carrier system selection. Structural system irregularities |
| **2** | Classification of structures. Carrier system selection. Structural system irregularities |
| **3** | Types of slabs. Beam slabs, one and two directional slabs |
| **4** | Reinforcement calculation with TS500-2000 tables. |
| **5** | Reinforcement calculation with TS500-2000 tables. |
| **6** | Beam load analysis, hollow slabs, various supported and loaded slabs. |
| **7** | Beam load analysis, hollow slabs, various supported and loaded slabs. |
| **8** | Midterm exam |
| **9** | Threaded floors |
| **10** | Threaded floors |
| **11** | Foundations, foundation types, Continuous foundations |
| **12** | Foundations, foundation types, Continuous foundations |
| **13** | Raft foundations |
| **14** | Raft foundations |
| **15** | Use of relevant regulations |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 5 | 60 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **146** |
|  | **Total workload / 30** | | **4.86** |
|  | **Course ECTS Credit** | | **5** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 4 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **QUANTİTİES AND EXPLORATİON WORK** | 221314134 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | Knowing the definitions and explanations in the tender legislation, unit prices, unit price types, their scope and calculation of unit prices, quantity survey and approximate cost calculations, being able to make quantity surveys based on the project and manufacturing and determining the approximate cost using these quantities, green book, attachments. |
| **Short Course Content** | Definitions and explanations in the tender legislation, definition of unit prices, analysis and use, quantity surveying and its properties, calculation of quantity surveying, approximate cost calculation methods and applications, price analyses, transportation prices, price differences, provisional and final acceptance procedures. |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Knowing the definitions and explanations in the tender legislation, understanding unit prices, unit price types, their scope and calculation of unit prices. | 1,4,5 | 1,5 | A |
| **2** | To be able to understand quantity surveying and approximate cost calculations, to make quantity surveys based on the project and manufacturing, and to determine the approximate cost using these quantities. | 2,4 | 1,5 | A |
| **3** | To be able to understand the green book, attachment book, survey book, construction site log book and how to arrange progress payments by using these books. | 5,10 | 1,5 | A |
| **4** | To be able to understand the approximate cost calculation methods and applications. | 4 | 1,5 | A |
| **5** | Price analysis, understanding price differences. | 4 | 1,5 | A |
| **6** | Understanding the provisional and final acceptance procedures | 4 | 1,5 | A |

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| **Main Textbook** | Özdemir, İ., (2005), Construction Management Lecture Notes, Eskişehir, ESOGU Printing House |
| **Supporting References** | 1. Laws and regulations published by PPP (Public Procurement Authority),  2. Beetroot farmer. A. Öcal ME, (1998), Construction Management and Cost Accounts, Ankara, Bilim Teknik Publishing House |
| **Necessary Course Material** | Projector, Computer, Professional Software Programs, Whiteboard |

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| **Course Schedule** | |
| **1** | Definitions and explanations in the tender legislation |
| **2** | Unit prices, unit price types, scope and calculation of unit prices |
| **3** | Conducting and using analyzes |
| **4** | Conducting and using analyzes |
| **5** | Metering and its features, taking the metering |
| **6** | Metering and its features, taking the metering |
| **7** | Metering and its features, taking the metering |
| **8** | Mid-Term Exam |
| **9** | Approximate cost calculation methods and applications |
| **10** | Approximate cost calculation methods and applications |
| **11** | Shipping Prices, Price Differences |
| **12** | Progress Payment Calculations |
| **13** | Progress Payment Calculations |
| **14** | Temporary and final acceptance procedures |
| **15** | Temporary and final acceptance procedures |
| **16,17** | Final Exam |

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| --- | --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | | |
| **Activities** | | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | | 12 | 4 | 48 |
| Homework | |  |  |  |
| QuizExam | |  |  |  |
| Studying for Quiz Exam | |  |  |  |
| Oral exam | |  |  |  |
| Studying for Oral Exam | |  |  |  |
| Report (Preparation and presentation time included) | |  |  |  |
| Project (Preparation and presentation time included) | |  |  |  |
| Presentation (Preparation time included) | |  |  |  |
| Mid-Term Exam | | 1 | 1 | 1 |
| Studying for Mid-Term Exam | | 1 | 14 | 14 |
| Final Exam | | 1 | 1 | 1 |
| Studying for Final Exam | | 1 | 14 | 14 |
|  | | **Total workload** | | **120** |
|  | | **Total workload / 30** | | **4** |
|  | | **CourseECTSCredit** | | **4** |
| **Evaluation** | | | | |
| **Activity Type** | **%** | | | |
| Mid-term | 40 | | | |
| Quiz |  | | | |
| Homework |  | | | |
|  |  | | | |
|  |  | | | |
| **Final Exam** | 60 | | | |
| **Total** | 100 | | | |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 4 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 5 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **INTERNSHIP APPLICATIONS** | 221314136 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 0 | 5 | 0 | 5 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
| ✓ | ✓ |  |  |  |

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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | Business Practice. |
| **Short Course Content** | Internship work |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Creates infrastructure and gains experience in all areas related to the profession. | [1,10] | 1,7,8 | E |

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| **Main Textbook** |  |
| **Supporting References** |  |
| **Necessary Course Material** |  |

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| --- | --- |
| **Course Schedule** | |
| **1** | Internship |
| **2** | Internship |
| **3** | Internship |
| **4** | Internship |
| **5** | Internship |
| **6** | Internship |
| **7** | Internship |
| **8** | **Internship** |
| **9** | Internship |
| **10** | Internship |
| **11** | Internship |
| **12** | Internship |
| **13** | Internship |
| **14** | Internship |
| **15** | Internship |
| **16,17** | **Internship** |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 4 | 56 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 3 | 36 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 30 | 30 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 30 | 30 |
|  | **Total workload** | | **154** |
|  | **Total workload / 30** | | **5** |
|  | **Course ECTS Credit** | | **5** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term |  |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 100 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 5 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 5 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 5 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

|  |  |
| --- | --- |
| **Course Name** | **Course Code** |
| **EARTHQUAKE INFORMATION** | 221314133 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To inform about the formation, characteristics, causes, faults and tectonic regions, faults and regions that cause earthquakes in our country and earthquake and soil interaction |
| **Short Course Content** | Formation of earthquakes, parameters, seismicity of Turkey |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | 1 - To be able to comprehend the formation mechanisms of earthquakes | 1,2,5,9,10 | 1,5 | A |
| **2** | 2 - Understanding earthquake parameters | 1,2,5,9,10 | 1,5 | A |
| **3** | 3 - Understanding the seismicity of Turkey | 1,2,5,9,10 | 1,5 | A |
| **4** | 4 - Understanding the relationship between earthquake and soil | 1,2,5,9,10 | 1,5 | A |
| **5** | 5 - To be able to comprehend the effects of earthquakes on society and environment | 1,2,5,9,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Earthquake Knowledge and Earthquake Narratives Turan Yüksel 2000 |
| **Supporting References** | - |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Earth's formation, internal structure |
| **2** | Plate tectonics |
| **3** | Cracks and Faults, Folds |
| **4** | Definition and occurrence of earthquake |
| **5** | Earthquake Parameters |
| **6** | Earthquake waves |
| **7** | Earthquake waves |
| **8** | Midterm exam |
| **9** | Identifying the location of the earthquake |
| **10** | Seismicity of Turkey |
| **11** | Seismicity of Turkey |
| **12** | Soil liquefaction |
| **13** | earthquake lights, tsunami |
| **14** | The importance of geological and geotechnical surveys in urban site selection and building construction |
| **15** | The importance of geological and geotechnical surveys in urban site selection and building construction |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **Course ECTS Credit** | | **4** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 3 |
| **5** | Can prepare and implement construction site work plans. | 5 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 3 |
| **8** | Uses professional package programs. | 4 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SİVRİHİSAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **WATER SUPPLY** | 221314137 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The main purpose of this course is to know the dimensioning of the main elements of water supply systems, the transmission and distribution of drinking and utility water. |
| **Short Course Content** | Population forecast, transmission lines, water tanks, networks |

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| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **ContributedPO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to calculate the flow rates that can be obtained from wells and galleries. | 1,7,10 | 1,5 | A |
| **2** | To be able to calculate transmission lines. | 1,7,10 | 1,5 | A |
| **3** | To be able to calculate the volume of water tanks. | 1,4,10 | 1,5 | A |

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| --- | --- |
| **Main Textbook** | Y. Muslu, Water Supply and Environmental Health with Solved Problems, Water Foundation publications |
| **Supporting References** | - |
| **Necessary Course Material** | Calculator |

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| **Course Schedule** | |
| **1** | Population Estimation Methods |
| **2** | Water consumption evaluations |
| **3** | Galleries |
| **4** | Wells |
| **5** | Flow calculations |
| **6** | Transmission Lines |
| **7** | Problem solutions |
| **8** | Mid-Term Exam |
| **9** | Design principles of hoppers |
| **10** | Design principles of hoppers |
| **11** | Determining the location of water tanks |
| **12** | Features of water networks |
| **13** | Head loss in variable flow pipes |
| **14** | Network solution with dead points method |
| **15** | Problem solutions |
| **16,17** | Final Exam |

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| --- | --- | --- | --- |
| **Calculation of CourseWorkload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 12 | 4 | 48 |
| Homework |  |  |  |
| QuizExam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **CourseECTSCredit** | | **4** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 3 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 4 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 5 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 4 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **DISASTER MANAGEMENT** | 221314131 |

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| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

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| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | The aim of this course is to give information about basic disaster information and to show students how to behave in case of disaster. |
| **Short Course Content** | Disaster and Disaster Types; Structures and Disaster; Earthquake; Characteristics of Earthquakes; Fault Systems and Earthquake Activity; Disaster Risk Areas in Turkey; Buffer Zone Formation; Pre and Post Earthquake Studies; HydroMeterological Disasters; Global Climate Change and Climate Risk |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | Disaster Management and Basic Concepts: | 1,5,6,10 | 1,5 | A |
| **2** | Structures and Disaster | 6 | 1,5 | A |
| **3** | Disaster Management, Stages of Disaster Management | 1,5,6,10 | 1,5 | A |
| **4** | Disaster Risk Areas in Turkey | 1,5,6,10 | 1,5 | A |
| **5** | Disaster Management and Public Organization in Turkey: AFAD. | 5,6, | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Basic Disaster Awareness - Disaster Management Practices in Rural Areas |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Disaster Management and Basic Concepts |
| **2** | Disaster Management and Basic Concepts |
| **3** | Disaster and Disaster Types |
| **4** | Disaster and Disaster Types |
| **5** | Structures and Disaster |
| **6** | Structures and Disaster |
| **7** | Disaster Risk Areas in Turkey |
| **8** | Midterm exam |
| **9** | Buffer Zone Formation; Studies to be carried out before and after earthquakes. |
| **10** | HydroMeterological Disasters; Global Climate Change and Climate Risk Management. |
| **11** | Mass Movement; Structures and Earthquake. |
| **12** | Technological Disasters; Disaster Management and Public Organization in Turkey: AFAD. |
| **13** | Studies to be carried out in Disaster Preparedness Phase and Application Examples |
| **14** | Disaster Response Studies and Ap |
| **15** | Buffer Zone Formation; Studies to be carried out before and after earthquakes. |
| **16,17** | Final exam |

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| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 8 | 4 | 32 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) | 2 | 4 | 8 |
| Presentation (Preparation time included) | 2 | 4 | 8 |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 9 | 9 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 9 | 9 |
|  | **Total workload** | | **110** |
|  | **Total workload / 30** | | **3,67** |
|  | **Course ECTS Credit** | | **4** |

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| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 4 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 5 |
| **7** | Knows the quality control and standards related to the profession. | 4 |
| **8** | Uses professional package programs. | 3 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 5 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| **SYSTEM ANALYSIS AND DESIGN** | 221314135 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 2 | 2 | 3 | 4 |

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| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| --- | --- | --- |
| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Associate degree | Elective |

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| --- | --- |
| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To be able to comprehend the design principles of the study to be applied in the package program. |
| **Short Course Content** | Reinforced concrete structural systems, introduction of the package program, entering the structural system into the package program, analyzing the structural system |

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| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to apply data entry principles to a package program, | 2,8 | 1,5 | A |
| **2** | To be able to analyze the system and comprehend the results. | 2 | 1,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Lecture notes |
| **Supporting References** | Examples compiled from various sources |
| **Necessary Course Material** | Projector, Computer |

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| **Course Schedule** | |
| **1** | Carrier systems |
| **2** | Selection of materials in the package program |
| **3** | Editing analysis options |
| **4** | Entering axes |
| **5** | Entering superstructure elements |
| **6** | Application: entering superstructure elements |
| **7** | Entering the foundation system |
| **8** | Midterm exam |
| **9** | Application: single, continuous and raft foundation entry |
| **10** | Control of data entry errors |
| **11** | Analysis of the carrier system |
| **12** | Analysis of the carrier system |
| **13** | Evaluation of the analysis result |
| **14** | Drawing of formwork plan, column application plan, foundation application plan, beam and column expansions. |
| **15** | Drawing of formwork plan, column application plan, foundation application plan, beam and column expansions. |
| **16,17** | Final exam |

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| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **Course ECTS Credit** | | **4** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

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| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)**(5: Very high, 4: High, 3:Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 5 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 3 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 4 |
| **5** | Can prepare and implement construction site work plans. | 3 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 3 |
| **8** | Uses professional package programs. | 5 |
| **9** | Knows Business Management. | 3 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **11** |  |  |
| **12** |  |  |

**ESOGU SIVRIHISAR VOCATIONAL SCHOOL**

**CONSTRUCTION TECHNOLOGY PROGRAM**

**COURSE INFORMATION FORM**

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| --- | --- |
| **Course Name** | **Course Code** |
| **ENERGY MANAGEMENT** | 221314140 |

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| --- | --- | --- | --- | --- |
| **Semester** | **Number of Course Hours per Week** | | **Credit** | **ECTS** |
| **Theory** | **Practice** |
| 4 | 3 | 0 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Category (Credit)** | | | | |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| Turkish | Undergraduate | Elective |

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| --- | --- |
| **Prerequisite(s) if any** | No |
| **Objectives of the Course** | With this course, students will be provided with basic competencies regarding the efficient and economical use of energy. |
| **Short Course Content** | Energy management, increasing energy efficiency, energy saving, alternative energy sources. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning Outcomes of the Course** | | **Contributed PO(s)** | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To be able to recognise the general energy situation of Turkey | 1,9,10 | 1,2,5 | A |
| **2** | Increasing energy efficiency | 1,9,10 | 1,2,5 | A |
| **3** | Energy saving in electrical systems and lighting | 1,9,10 | 1,2,5 | A |

|  |  |
| --- | --- |
| **Main Textbook** | Energy Saving and Renewable Energy Resources (Elect. Engineer Yusuf Yaman) |
| **Supporting References** |  |
| **Necessary Course Material** | Computer and projector |

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| --- | --- |
| **Course Schedule** | |
| **1** | Classification of energy types |
| **2** | Turkey's General Energy Situation |
| **3** | Turkey's Energy Consumption |
| **4** | Energy Management |
| **5** | Energy efficiency |
| **6** | Energy efficiency |
| **7** | Energy saving methods |
| **8** | Midterm |
| **9** | Renewable energy sources |
| **10** | Renewable energy sources |
| **11** | Usable energy, storable energy |
| **12** | Areas of use of energy |
| **13** | Areas of use of energy |
| **14** | Waste energy recovery in industrial applications |
| **15** | Waste energy recovery in industrial applications |
| **16,17** | Final Exams |

|  |  |  |  |
| --- | --- | --- | --- |
| **Calculation of Course Workload** | | | |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 3 | 42 |
| Classroom Studying Time (review, reinforcing, prestudy,….) | 7 | 4 | 28 |
| Homework |  |  |  |
| Quiz Exam |  |  |  |
| Studying for Quiz Exam |  |  |  |
| Oral exam |  |  |  |
| Studying for Oral Exam |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Mid-Term Exam | 1 | 1 | 1 |
| Studying for Mid-Term Exam | 1 | 14 | 14 |
| Final Exam | 1 | 1 | 1 |
| Studying for Final Exam | 1 | 14 | 14 |
|  | **Total workload** | | **120** |
|  | **Total workload / 30** | | **4** |
|  | **Course ECTS Credit** | | **4** |

|  |  |
| --- | --- |
| **Evaluation** | |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz |  |
| Homework |  |
|  |  |
|  |  |
| **Final Exam** | 60 |
| **Total** | 100 |

|  |  |  |
| --- | --- | --- |
| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) | | |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |
| **2** | Can draw the necessary drawings in the preparation of architectural and static projects of buildings both manually and on the computer. | 2 |
| **3** | Can use measuring instruments to determine and evaluate the topographic structure of the construction site. | 2 |
| **4** | It carries out quantity surveying and surveying operations and can arrange progress payments. | 2 |
| **5** | Can prepare and implement construction site work plans. | 2 |
| **6** | Can perform experiments on building materials. | 2 |
| **7** | Knows the quality control and standards related to the profession. | 2 |
| **8** | Uses professional package programs. | 2 |
| **9** | Knows Business Management. | 5 |
| **10** | Can assist civil engineers with their technical knowledge and skills in project construction and control works. | 4 |