



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204107	TURKISH LANGUAGE 1	(X) Fall ... Spring	2	0	2

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Lecturer Ümit KARUL	(X) Turkish ... English	(X)			(X)

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	To have every young person who will complete their higher education comprehend the structure and functioning of their mother tongue properly, to have them obtain the ability to use Turkish correctly and perfectly as a written and oral communication tool in terms of language-thought connection, and to make a unifying language dominant in education. To provide students with the ability to read, understand what they read, and express their feelings and thoughts in a complete, accurate and effective way, either verbally or in writing. To raise young people who are conscious of their mother tongue.
Course Content	1-What is language? The place and importance of language in the life of the nation as a social institution; language-culture relationship. 2-Culture, Characteristics of Culture, Language-Culture Relation 3-Classification of languages and the place of Turkish among world languages 4-The development of the Turkish language and its historical periods 5-The current state of the Turkish language and its breadth areas 6-Sounds and classification of sounds in Turkish 7-Turkish phonetic features and rules about phonetics 8- Midterm Exam 9-Semantics 10-Spelling rules and practices 11-Punctuations and practices 12-Derivational affixes and practices 13-Inflection affixes and practices 14-General information about the composition 15-The outline for composition writing and practices

	16-Final Exam
Course Learning Outcomes	<p>1-Gains the ability to use Turkish correctly and beautifully as a means of written and oral expression.</p> <p>2-They acquire the skills to use the language correctly, effectively and beautifully in various professions and scientific fields, and learn the Turkish equivalents of various terms, if any.</p> <p>3-Learns how to access accurate information, use it, and present it using appropriate methods.</p> <p>4-He/she understands the importance of reading, researching and writing and improves himself/herself in these aspects.</p>
Recommended Resources	Özkan, A., Aşçı, U. D., & Toker, M. (2013). Türk dili: dil ve anlatım. Palet Yayınları.



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204113	Introduction to Civil Engineering	X Fall	2	0	2
		... Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Mehmet KAMANLI	X Turkish ... English	X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	%40
	Final Exam	1	%60

Course Objectives and Goals	This course aims to provide students with an understanding of the historical development, fundamental concepts, and application areas of civil engineering, as well as the social significance of the engineering profession. It also helps students comprehend the
Course Content	<ol style="list-style-type: none">1- Introduction, Human History and the Beginning of Construction Activities2- Definition and Classification of Construction3- Construction Activities in Ancient Civilizations4- Building Art in the Middle Ages and Islamic Civilizations5- Development of Engineering During the Renaissance and the Industrial Revolution6- Developments in Civil Engineering During the 19th and 20th Centuries7- Modern Construction Technologies and Megastructures8- The Relationship Between Science, Technology and Engineering9- History of Science and Technology10- The Concept of Engineering and Civil Engineering11- Fields of Specialization in Civil Engineering12- History of Civil Engineering Education in the World13- Development of Civil Engineering Education in Turkish History14- The Role and Future of Civil Engineering in the Modern World
Course Learning Outcomes	<ul style="list-style-type: none">• Explain the historical development of construction activities.• Identify and classify different types of constructions.• Analyze the relationship between science, technology, and engineering.• Understand the basic principles and ethical responsibilities of engineering.• Summarize the evolution of civil engineering education in Turkey and worldwide.

	<ul style="list-style-type: none">• Discuss the concepts of technology and sustainability in modern engineering practices.
Recommended Resources	Lecture Notes



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Hydraulic

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204114	Occupational Health and Safety 1	X Fall	2	0	2
		... Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assist. Prof. Mustafa ONÜÇYILDIZ	X Turkish ... English			X	
		X			

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	Providing participants with the necessary information to ensure OHS in working life and to gain a safety culture.
Course Content	1- Occupational health and safety (OHS) concept and various definitions, 2- Historical development, 3- National and international organizations, 4- OHS in laws, 5- International conventions, 6- Basic theories, 7- Work accident and occupational diseases, 8- Safe living culture, 9- Occupational health and safety studies-Planning, 10- Occupational Health and Safety Law No. 6331, 11- Occupational health and safety regulations, 12- Occupational safety expertise and duties, 13- Responsibilities of employers and employees, 14- Things to do during the epidemic period.
Course Learning Outcomes	1- Information will be obtained regarding Occupational Health and Safety and the establishment of a culture. 2- Information will be obtained regarding relevant national and international institutions and organizations. 3- Information will be obtained regarding Occupational Health and Safety planning activities, taking into account laws and regulations. 4- Information will be obtained regarding authorities and responsibilities, as well as what to do during epidemics.

Recommended Resources

Law No. 6331 and related regulations



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Foreign Language (English)

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204150	Foreign Language 1 (English)	... Fall			
		(X) Spring	3	0	3

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Öğr. Gör. Naile Canlı Cingöz	... Turkish				
	(X) English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	This course aims to develop students' four language skills (speaking, listening, reading, and writing) to reach level B1 (CEFR). In addition, it aims to build students' confidence in communicating in English across social, professional, and academic settings.
Course Content	<ol style="list-style-type: none">1. Giving personal information and introducing family members, talking about people you know.2. Talking about belongings and everyday things.3. Talking about what you do every day, at weekends, etc., using the expressions do, have and make.4. Talking about the workplace, work and work items. (use of this, that, these, those).5. Talking about what you are doing now, sports and exercise.6. Talking about exercise routines and comparing what we are doing now and what we usually do (Present Simple and Present Continuous).7. Talking about your plans, making and accepting invitations, planning where and when to meet.8. Talking about celebrations and giving and receiving gifts (object pronouns).9. Mid-term Exam10. Talking about past events in your life, reacting to good and bad news.11. Talking about a special day in your life and asking questions about the past. Talking about a special picture from our childhood12. Talking about shopping habits and money, and planning a future shopping trip.13. Explaining a language problem and the function of what you want. Describing shopping activities related to shopping and money

	<p>terms.</p> <p>14. Reviewing topics related to the past.</p> <p>15. Final Exam</p>
Course Learning Outcomes	<p>1. Students will be able to read short texts and a story at A2 level; they will be able to understand information about simple everyday materials such as short texts, advertisements, brochures, menus, timetables and short personal letters/emails, and answer questions on these topics.</p> <p>2. Students will be able to write simple texts, messages, and short paragraphs on topics of their choice, as well as simple personal letters/emails, such as thank-you letters.</p> <p>3. Students will be able to communicate in routine tasks requiring simple and direct information exchange on familiar topics and activities; they will be able to ask and answer questions about themselves, their families, educational background, abilities, interests, daily routines, plans, past events and life experiences, etc.; they will be able to make presentations on similar topics.</p> <p>4. Students will be able to answer questions related to audio recordings containing the most frequently used words and expressions related to their personal interests (basic personal and family information, daily routines, school or work life, talents, interests, shopping, responsibilities, home and environment). They will be able to identify the main idea in short, clear and simple messages, announcements and dialogues.</p>
Recommended Resources	<p>1-Life Elementary - Student's book + workbook (National Geographic Learning)</p> <p>2-The Piano (Stage 2) Oxford Bookworms</p>



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204162	PHYSICS	... Spring			
		(X) Fall	3	2	6

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Asst. Prof. Emine GURPINAR GULER	(X) Turkish				
	... English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	The aim of this course is to provide students with a clear and detailed understanding of the fundamental concepts and principles of mechanics. It also aims to demonstrate the applications of these principles and concepts in both everyday life and engineering practices, thereby enhancing comprehension. The course is
Course Content	1-Physics and Measurement 2-Motion in One Dimension 3-Vectors 4-Motion in Two Dimensions 5-Laws of Motion 6-Circular Motion and Other Applications of Newton's Laws 7-Work and Kinetic Energy 8-Potential Energy and Conservation of Energy 9-Midterm Exam 10-Linear Momentum and Its Conservation, Impulse and Momentum 11-Elastic and Inelastic Collisions in One Dimension, Two-Dimensional Collisions, Center of Mass, Motion of a System of Particles 12-Rotation of a Rigid Body About a Fixed Axis Angular and Linear Quantities, Rotational Energy, Calculation of Moment of Inertia 13-Torque, Relation Between Torque and Angular Acceleration, Work, Power and Energy in Rotational Motion 14-Final Exam

<p>Course Learning Outcomes</p>	<p>1-Defines the concepts of measurement, distance, mass, and time. Performs conversions of length and mass between different unit systems. Determines the amount of error in calculations.</p> <p>2-Understands coordinate systems and performs vector operations. Determines the position and distance of an object within a coordinate system.</p> <p>3-Explains one- and two-dimensional motions. Understands that the magnitude or direction of velocity may change with time. Defines the concept of acceleration.</p> <p>4-Analyzes motion in inertial and non-inertial reference frames. Identifies the sources of acceleration. Comprehends the action–reaction principle and explains circular motion.</p> <p>5-Explains the concepts of energy and energy transformation. Defines the concept of work in physics. Expresses the relationship between work and energy. Describes the difference between potential and kinetic energies arising from an object’s position and motion.</p> <p>6-Explains the concepts of linear and angular momentum. Understands the principle of conservation. Analyzes elastic and inelastic collisions in one and two dimensions.</p> <p>7-Analyzes the rotation of a rigid body about an axis. Evaluates angular displacement, angular velocity, and angular acceleration. Understands angular and linear quantities. Calculates rotational energy and moment of inertia. Examines the rotation of bodies about a fixed axis. Understands the relationship between torque and angular acceleration. Analyzes the rolling motion of a rigid body.</p>
<p>Recommended Resources</p>	<p>-Fen ve Mühendislik İçin Fizik I, Serway-Beichner, Çeviri Editörü: Kemal ÇOLAKOĞLU, Palme Yayıncılık, Ankara, 2002.</p> <p>2-Giancoli, D. C. (2008). Physics: Principles with Applications (6th ed.). Pearson.</p> <p>3-James S. Walker (2009). Physics (4th ed.) Addison-Wesley.</p> <p>4-Fiziğin Temelleri, David Halliday, Robert Resnick, Jearl Walker</p> <p>5-Üniversite Fiziği, Hugh D.YOUNG ve RogerA. FREEDMAN</p>



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KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204163	CHEMISTRY	(X) Fall			
		... Spring	2	2	4

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Mustafa TABAKCI	(X) Turkish				
	... English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	The aim of the course is for students to learn the ideas and concepts used to understand and manipulate chemical changes. In addition, it is aimed to enable students to associate the observed phenomena with the concepts of atoms, ions and molecules.
Course Content	<ol style="list-style-type: none"> 1. Basic chemical and physical properties of matter 2. Atom and molecule theory, historical development of chemistry. explanation of laboratory rules 3. Atomic theories and the structure of the atom and the introduction of laboratory materials 4. Electron distribution in atom, periodic table and basic properties of elements. 5. Compounds, types of compounds, nomenclature and formulas, conservation of matter experiment 6. Basic calculations in chemistry, chemical equations, stoichiometry and determination of the limiting component, law of constant proportions experiment 7. Reaction types and balancing reactions, stoichiometry experiment 8. MIDTERM EXAM 9. Basic properties of gases, ideal gas equation, determination of relative diffusion rates of gases experiment 10. Real gases, kinetic theory of gases, 11. Thermochemistry, standard formation enthalpy, endothermic and exothermic reactions, thermochemistry experiment 12. Basic properties of liquids and solids, determination of melting and boiling points experiment 13. Solutions, concentration units, preparation of solutions, preparation of solutions experiment 14. Acids and bases, titration experiment

	15. FINAL EXAM
Course Learning Outcomes	<ol style="list-style-type: none"> 1. Students will learn the basic concepts of chemistry. 2. Students will learn to associate the chemistry topics they learned in the course with engineering topics. 3. Students will learn to conduct experiments related to course topics in the laboratory. 4. Students will be able to write and balance simple chemical reactions. They will be able to evaluate the energy status of a reaction.
Recommended Resources	<ol style="list-style-type: none"> 1. E.Mortimer, Modern University Chemistry I-II”, Translation Editor T.Altınata, Publisher: Çağlayan, 1988. 2. R.H.Petrucci, W.S.Harwood, F.G.Herring, “General Chemistry 1-2. Principles and Modern Practices”, Translation Editors: Tahsin Uyar, Serpil Aksoy, Eighth Edition, Palme Publishing, 2002. 3. Raymon Chang “General Chemistry” Translation: Tahsin Uyar, Serpil Aksoy, Recai İnam, Palme Publishing, Ankara.



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Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204172	PLANNING AND ORGANIZATION (SSD 1)	X Fall	2	0	3
		... Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Mustafa Tolga ÇÖĞÜRCÜ	X Turkish ... English		X	X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	<p>The aim of this program is to introduce civil engineering students to the concepts of planning, time management, and organization, while also developing effective resource utilization, teamwork, and problem-solving skills in engineering projects. By understanding the logic of project planning, students gain a perspective that will form the basis for future courses in construction site management, project management, and costing.</p>
Course Content	<ol style="list-style-type: none">1-Introduction to the Course and Overview2-The Concept of Planning3-Fundamentals of Organization4-Project and Project Management Concepts5-Time Management6-Resource Management7-Organizational Charts in Construction8-Teamwork and Leadership9-Problem-Solving Techniques10-Midterm11-Decision-Making Processes12-Simple Project Planning Application13-Ethics and Professional Responsibility14-Course Review
Course Learning Outcomes	<ol style="list-style-type: none">1-Defines the concepts of planning, organization and management.2-Explains the basic components of a project (time, cost, scope, quality).3-Gains the ability to use resources efficiently and sequence work

	4-Creates a simple work schedule (e.g. Gantt chart).
Recommended Resources	Lecture Notes



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Structure

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204173	MEGA STRUCTURES AND THEIR SOCIAL IMPACTS IN CIVIL ENGINEERING (SSD 1)	X Fall ... Spring	2	---	3

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Musa Hakan ARSLAN	x Turkish ... English		x	x	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment	1	---
	Project	1	---
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	<p>The primary aim of this course is to provide students with a holistic understanding of the design, construction, and operation processes of mega structures in the field of civil engineering, considering their technical, economic, environmental, and social dimensions. Mega structures include high-cost, complex, and large-scale projects such as bridges, dams, skyscrapers, tunnels, airports, stadiums, and major transportation infrastructures. These structures must be evaluated not only from an engineering perspective but also in terms of their social, cultural, and economic impacts.</p>
Course Content	<ol style="list-style-type: none">1. Introduction to Civil Engineering: Definition, History, Sub-disciplines, and Course Overview2. Engineering Ethics, Social Responsibility, and Principles of Public Interest3. Engineering Techniques and Societal Impacts of Ancient Mega Structures (e.g., Göbeklitepe, Pyramids)4. Architectural Systems and Imperial Representation in Roman and Byzantine Eras (e.g., Hagia Sophia, Aqueducts)5. Structural Heritage and Engineering Organization in the Middle Ages and Islamic World6. Modernization in Engineering During the Industrial Revolution and Iconic Structures7. Urbanization in the 20th Century: Concrete Technology and the Role of Mega Structures in City Planning8. Mega Structures in Turkey: Engineering Vision from the Republican Era to the Present9. Successes and Failures in International Mega Projects:

	<p>Environmental and Social Impacts</p> <ol style="list-style-type: none"> 10. Sustainability, Disaster Resilience, and Risk Management in Mega Structures 11. Smart Cities, Digitalization, and Emerging Engineering Technologies 12. Social Impacts of Mega Structures: Participatory Design and Social Sustainability 13. Student Project Presentations and Case Analyses of Technical and Societal Aspects 14. General Evaluation, Review of Learning Outcomes, and Professional Development Recommendations
<p>Course Learning Outcomes</p>	<ol style="list-style-type: none"> 1. Explain the fundamental definition, historical development, and sub-disciplines of civil engineering; comprehend the scope and objectives of the course. 2. Identify the principles of engineering ethics; evaluate concepts of social responsibility and public interest within a professional context. 3. Analyze the engineering techniques and societal impacts of ancient mega structures within their historical context. 4. Describe architectural systems and structural technologies of the Roman and Byzantine periods; interpret the relationship between architecture and political representation. 5. Recognize the structural heritage of the Middle Ages and the Islamic world; evaluate engineering organizations in their cultural context. 6. Explain the transformation of engineering during the Industrial Revolution; discuss the technological and societal significance of iconic structures. 7. Assess the role of mega structures in 20th-century urbanization and the development of concrete technology. 8. Analyze examples of mega structures in Turkey from historical and technical perspectives; interpret the national engineering vision. 9. Explain the reasons behind the success and failure of international mega projects; evaluate their environmental and social impacts. 10. Define sustainability principles and disaster resilience strategies in mega structures; apply risk management approaches. 11. Identify future engineering technologies in the context of smart cities and digitalization; evaluate innovative design tools. 12. Analyze the social impacts of mega structures; apply participatory design and social sustainability principles. 13. Evaluate selected mega structure examples from technical and societal perspectives; demonstrate group work and critical thinking skills. 14. Review the overall course achievements; develop recommendations for professional growth and reflect on the learning process.
<p>Recommended Resources</p>	<ol style="list-style-type: none"> 1. Mega Infrastructure Projects: A Global Perspective Yazar: Hugo Priemus, Bent Flyvbjerg, Bert van Wee Yayınevi: Edward Elgar Publishing Yıl: 2008 2. Structural Engineering: A Very Short Introduction Yazar: David Blockley Yayınevi: Oxford University Press Yıl: 2014



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204213	BUILDING AND ARCHITECTURE INFORMATION	... Fall (X) Spring	2	0	2

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assoc. Prof. Dr. Selçuk SAYIN	(X) Turkish ... English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	It is aimed to define the professional relationship between civil engineering and architecture. Main concepts and principles of architecture and buildings are presented to the civil engineering students.
Course Content	1st week-Definition of architectural terms 2nd week-Zoning regulations-lot, garden 3rd week-Zoning status-exercises 4th week-Essential documentation for construction permit 5th week-Building-building classifications 6th week-Foundation soil-site investigation – excavation 7th week-Fortifications- building foundations 8-MIDTERM EXAM 9th week-Architectural project structural system examination 10th week-Structural system design exercise 11th week-Staircases-ramps-elevators 12th week-Staircase exercise 13th week-Roofs 14th week-Roofs-exercise 15th week-Final Exam
Course Learning Outcomes	1-Gain knowledge of cooperation between architect and civil engineer. 2-Gain knowledge of zoning regulations. 3-Gain knowledge of building construction process. 4-Gain knowledge of building elements and their functions
Recommended Resources	1-Ferrelly, F., Mimarlığın Temelleri, Literatür Yayınları, İstanbul, 2011 2-Özcan, K., Yapı, Bilim Yayınları, İstanbul 3-Türkçü, Ç., Yapım, Birse Yayınları, İstanbul, 2004 4-Sarı, A., Düşey Sirkülasyon Araçları Merdivenler, YEM Yayınları,

İstanbul, 1996

5-Toydemir, N., Bulut, Ü., Çatılar, Yapı Yayın, İstanbul, 2004.

6-Planlı Alanlar Tip İmar Yönetmeliği



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Hydraulic

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204214	Occupational Health and Safety 2	... Fall			
		X Spring	2	0	2

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assist. Prof. Mustafa ONÜÇYILDIZ	X Turkish ... English				
		X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	To provide information on the importance of OHS in construction workplaces and the implementation of precautions.
Course Content	1- Building sector, 2- The economic size of the sector, 3- Occupational accidents and occupational diseases occurring in the sector, 4- Measures to be taken in construction workplaces, 5- Occupational health and safety regulation in construction workplaces, 6- Excavation works and measures to be taken, 7- Things to be done in underground works, 8- Measures to be taken in works carried out in closed areas, 9- Scaffolding types and OHS measures, 10- Things to be done in construction workplaces in the light of OHS regulations, 11- Emergency plans, 12- Health safety plans, 13- Health safety file, 14- Risk assessment report.
Course Learning Outcomes	1- Information will be obtained to establish a safety culture in the construction industry. 2- Information will be obtained about necessary safety measures in the construction industry. 3- Information will be obtained about working at heights and precautions. 4- Information will be obtained about the files and reports that need

	to be prepared.
Recommended Resources	Occupational Health and Safety Regulations in Construction Workplaces



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Foreign Language (English)

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204150	Foreign Language 2 (English)	... Fall (X) Spring	3	0	3

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Öğr. Gör. Naile Canlı Cingöz	... Turkish (X) English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	This course aims to develop students' four language skills (speaking, listening, reading, and writing) to reach level B1 (CEFR). In addition, it aims to build students' confidence in communicating in English across social, professional, and academic settings.
Course Content	<ol style="list-style-type: none">1. Talking about past trips using adjectives related to travel. Comparing different modes of transport. Comparative adjectives, superlative adjectives.2. Talking about travel experiences and using money. Learning and using expressions related to money. Practicing expressions for asking someone for something.3. Appearance and Descriptions. Talking about clothes, face and body parts. Learning adjectives related to festivals and special days and talking about past experiences. Present simple, present continuous, 'have got' structure.4. Talking about photos and pictures. Commenting on photographs and pictures. Describing one's own or someone else's appearance. Use of the verb 'like'.5. Talking about entertainment venues, films and television programmes. 'Be going to' (for future plans), infinitive of purpose.6. Using the correct verbs when talking about films and television. Inviting someone to an event and exchanging ideas about planning. Differences between the verbs 'see' and 'watch'.7. Talking about past experiences using words related to daily routines and education. Present perfect tense, structures comparing the past with the present (difference between present perfect and past simple).8. Mid-term Exam9. Talking about types of holidays and learning words related to

	<p>tourism. 'Have to / don't have to', 'can / can't', 'should / shouldn't', indefinite pronouns (something, nobody, anywhere).</p> <p>10. Using structures that express obligation and advice when making holiday plans. Making suggestions and exchanging ideas.</p> <p>11. Learning geographical terms related to the world. Talking about land and water forms. 'Will / won't' (future tense), articles.</p> <p>12. Revise the grammar structures covered in all units.</p> <p>13. Review topics covered in previous weeks. Identify areas of difficulty and do extra activities.</p> <p>14. Review all topics learned throughout the school year. Do speaking practice.</p> <p>15. Final Exam</p>
<p>Course Learning Outcomes</p>	<p>1. Students will be able to read short texts and a story at A2 level; they will be able to understand information about simple everyday materials such as short texts, advertisements, brochures, menus, timetables and short personal letters/emails, and answer questions on these topics.</p> <p>2. Students will be able to write simple texts, messages, and short paragraphs on topics of their choice, as well as simple personal letters/emails, such as thank-you letters.</p> <p>3. Students will be able to communicate in routine tasks requiring simple and direct information exchange on familiar topics and activities; they will be able to ask and answer questions about themselves, their families, educational background, abilities, interests, daily routines, plans, past events and life experiences, etc.; they will be able to make presentations on similar topics.</p> <p>4. Students will be able to answer questions related to audio recordings containing the most frequently used words and expressions related to their personal interests (basic personal and family information, daily routines, school or work life, talents, interests, shopping, responsibilities, home and environment). They will be able to identify the main idea in short, clear and simple messages, announcements and dialogues.</p>
<p>Recommended Resources</p>	<p>1-Life Elementary - Student's book + workbook (National Geographic Learning)</p> <p>2- Gulliver's Travels (Stage 1) Young Adult Eli Readers</p>



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Mechanics

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204261	STATICS	... Fall			
		X Spring	4	0	5

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. M. Sami DÖNDÜREN Assoc. Prof. Dr. Alptuğ ÜNAL	X Turkish ... English				
		X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	Considering the basic concepts, definitions and solution proposals of statics, basic problems of statics, truss systems calculation and ideal truss system design, friction force, center of gravity and moment of inertia, carrier systems, normal force, shear force and bending moment on beam elements in the carrier system, teaching static analysis approaches of cables exposed to axial tensile force.
Course Content	1-Introduction to statics, basic concepts and basic principles of statics. Basic problems of statics, solutions and support types 2-Summation of the system of forces applied at a point and equilibrium conditions 3-Moment of force about a point and couple theory. 4-Theorems about the couple and bringing the space system of forces to a center 5-Equilibrium conditions of the space force system. 6-Special cases and Varignon's Theorem. Examples of equilibrium conditions of the system of planar forces. 7-Finding the center of gravity calculations, examples. 8-General question solving 9-Moment of inertia calculations, examples 10-Calculation of shear force and bending moment in beams. 11-Calculation of cage systems 12-Knots method and Ritter Method. 13-Calculation of tensile force in suspended cables. 14-Frictional force.
Course Learning Outcomes	The basic concepts of statics will be taught and their relationship with real situations will be determined. It will be possible to determine the cross-sectional effects that occur under the effect of external load in the carrier systems. The basic concepts of civil engineering will be given and the student's infrastructure will be

	formed for Civil Engineering.
Recommended Resources	Engineering Mechanics-Static-Hibbeler



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204263	Computer Aided Technical Drawing	... Fall	3	2	5
		X Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Doç. Dr. Arife AKIN Dr. Öğr. Üyesi Adnan KARADUMAN	X Turkish				
	... English	X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment	12	20
	Project		
	Midterm Exam	1	20
	Final Exam	1	60

Course Objectives and Goals	To draw three views of a given object using technical drawing materials, to draw perspective from three views, to make a section from perspective, to teach using Rapito pen, to make drawings with the help of AutoCad program.
Course Content	1- Introduction of technical drawing materials, introduction to the drawing program on the computer and the introduction of the program. 2- Line work, editing the drawing screen in AutoCad, introduction of basic drawing commands and menus. 3- Line work, introduction of basic editing commands on the computer, application of basic drawing and editing commands 4- Line and compass work, geometric drawings and applications on the computer 5- Projection study, presentation of layers in computer and application examples 6- Explanation and applications of 3 views from perspective, dimensioning and text menus on the computer 7- 3 views from perspective, geometric drawings and applications on the computer 8- 3 perspective extraction from view, technical drawings on computer, truss drawing application example 9- Line work with a ropito pen, technical drawings on the computer, application example of reinforced concrete beam detail 10- Dimensioning work with ropito pen, technical drawings on computer, mold plan application example 11- Sectioning from perspective with ropito pen, technical drawings on computer, application example of column application plan 12- Sectioning from perspective with ropito pen, technical drawings on computer, application example of basic mold plan

	13- Working on scaling, technical drawings on computer, application example of foundation beam detail 14- Floor plan drawing with ropito pen, scaling and printing of technical drawing plans on computer
Course Learning Outcomes	1-Developing the student's ability to use tools by introducing and gaining the use of tools related to drawing and making line work. 2-Developing the student's drawing skills by using a ropito pen, 3 views from perspective and perspective from 3 views. 3-Reinforcing the learned and gained drawing skills with AutoCad program, which is frequently used in the construction industry.
Recommended Resources	1-Teknik Resim - Prof. Dr. Nejat KIRAÇ 2-AutoCad 2019 - Gökalp BAYKAL



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204271	Scientific Research and Presentation Techniques (SSD 2)	... Fall	2	0	3
		X Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Ülkü Sultan KESKİN	X Turkish				
	... English		X	X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	X	40
	Final Exam	X	60

Course Objectives and Goals	To ensure that civil engineering students have knowledge about conducting scientific research and presenting research results.
Course Content	<ul style="list-style-type: none"> 1-Definition and importance of scientific research 2-Scientific research methods and processes 3-Rules for writing scientific research reports 4-Use of graphs and tables in writing research reports 5-Ethical principles in writing research reports 6-Developing oral communication skills, elements to consider 7-Body language techniques 8-Using effective body language when presenting 9-Programs used to prepare presentation files 10-Points to consider when preparing presentation files, use of colors, slide design, use of time 11-Points to consider when preparing presentation files, use of colors, slide design, use of time 12-Student presentation 13-Student presentation 14-Student presentation
Course Learning Outcomes	<p>They will learn scientific research methods and techniques.</p> <p>They will be able to explain the stages of the scientific research process through practical application.</p> <p>They will learn the tools needed to successfully communicate scientific research results.</p> <p>They will gain the ability to make effective presentations.</p> <p>They will be able to design a presentation file on a scientific research topic and deliver a presentation in front of an audience.</p>
Recommended Resources	Scientific Research and Presentation Techniques (Prof. Dr. Asım Saldamlı, Deta Publishing, 2016)



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KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204272	HISTORY OF SCIENCE (SSD-1)	... Fall			
		X Spring	2	0	3

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Mehmet KAMANLI	X Turkish				
	... English		X	X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	X	40
	Final Exam	X	60

Course Objectives and Goals	To help engineering students, who are studying one of the positive sciences, understand the importance of the history of science from different perspectives, to compile scientific developments under a systematic framework
Course Content	<ol style="list-style-type: none">1. General information on the history of science,2. The foundations of scientific thought and its historical development,3. The role of Anatolian Turks and Muslim scientists in the history of science,4. Fuat Sezgin and anecdotes about important scientists5. The place of Andalusia in the history of science6. The Renaissance7. The printing press and beyond8. Important periods, events, and scientists in the history of science9. Major museums in Europe and Turkey10. Art history - brief summaries11. Scientific developments in the 20th century12. Scientific developments in the 21st century13. The development of space, nuclear sciences, and the military industry14. The internet, artificial intelligence, and digitalization
Course Learning Outcomes	Provides information about the history of science Follows scientific developments Provides information about important scientists
Recommended Resources	Science History Lecture Notes



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Geological Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204330	Geology for Civil Engineers	(X) Fall	2	0	2
		Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assoc. Prof. Dr. A. Ferat Bayram Assoc. Prof. Dr. Ali BozdağTurkish				
	(X) English	(X)		(X)	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	To provide general geological information. To demonstrate the relationship between geology and civil engineering. To provide an understanding of the importance of earth science in civil engineering practices. To provide an understanding of the geological aspects of natural disasters.
Course Content	1-Introduction: Definition and subject of geology 2-The Earth and Its Structure 3-Tectonic Deformation of Rocks: Joints, Veins and Faults 4-Geological Time Scale 5-External Dynamic Processes 1: Weathering and Transportation 6-External Dynamic Processes 2: Sedimentation and Depositional Environments 7-Geological Hazards 1: Erosion, Water Systems and Their Environmental Effects, Mass Movements 8-Geological Hazards 2: Volcanoes, Earthquakes 9-Midterm Exam 10-Rock forming Minerals 11-Rocks 12-Engineering Geology 1: Rock Strength Properties 13-Engineering Geology 1: Soil Strength Properties 14-Foundation Investigations 15-Usage areas of rocks 16-Final Exam
Course Learning Outcomes	1-Understanding the ground beneath the building stock for civil engineers. 2-Recognize the rocks and minerals that make up the ground. 3-Recognizing natural disasters and having an idea about the damage they can cause to the building stock. 4-By analyzing geological problems, students acquire the competence

	to design safe and sustainable projects in civil engineering applications.problems.
Recommended Resources	1-Mühendislere Jeoloji Ders Notları, Doç. Dr. A. Ferat Bayram 2-Engineering Geology and Construction, Fred G. Bell 3- Physical Geology: The Study of the Earth, James S. Monroe and Reed Wicander



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Mechanics

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204353	DYNAMICS	X Fall	3	0	4
		... Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assoc. Prof. Dr. Alptuğ ÜNAL Assoc. Prof. Dr. Ceyhun AKSOYLU	X Turkish ... English				
		X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	To learn mathematical formulas of dynamical problems, define kinetic and kinematic problems, and develop problem-solving skills. To learn the kinematics and kinematics of moving systems and bodies, to understand the basic concepts of vibration, and to examine the kinetics and kinematics of rigid bodies.
Course Content	1-Fundamental theories 2-Particle kinematics and irregular motion 3-General Curvilinear Motion, Orthogonal Components in Curvilinear Motion, Projectile Motion 4-Normal and Tangential Components in Curvilinear Motion, Cylindrical Components in Curvilinear Motion 5-Absolute Dependent Motion Analysis of Two Particles, Analysis of Relative Motion of Two Particles with Shifted Axes 6-Particle Kinetics: Force and Acceleration 7-Particle Kinetics: Force and Acceleration-Question Solution 8-General Review and General Question Solving 9-Planar Kinematics of a Rigid Body 10-Planar Kinematics of a Rigid Body 11-Kinetic Equations of Planar Motion 12-Vibration 13-Vibration-Question Solution 14-Vibration-Question Solution
Course Learning Outcomes	The fundamental concepts of dynamics will be taught, and their relationship with real situations will be determined. The condition of vibration in civil engineering in practice will be learned. Will be able to learn kinematics and kinetics of moving systems and objects.
Recommended Resources	Engineering Mechanics-Dynamic-Hibbeler



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Construction Materials

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204361	MATERIAL SCIENCE	X Fall Spring	3	0	4

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Ülkü Sultan KESKİN	X Turkish ... English	X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	40
	Final Exam	1	60

Course Objectives and Goals	To teach the general properties of construction materials.
Course Content	1-Subject and introduction of materials science 2-Mechanical properties of materials 3-Mechanical properties of materials 4-Mechanical properties of materials 5-Internal structure of materials and fracture theories 6-Technological properties of materials 7-Technological properties of materials 8-Physical properties of materials 9-Midterm exam 10-Properties of hollow material 11-Properties of hollow material 12-Properties of hollow material 13-Thermal Properties 14-Acoustic Properties 15-Harmful External Effects and Protection Remedies
Course Learning Outcomes	1-Learns the basic concepts of materials science.. 2-Learns the internal structure of the material.. 3-Learns the basic properties of the material.. 4-Learns the external effects affecting the material
Recommended Resources	Lecturer Notes



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KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204362	STATISTICS AND NUMERICAL ANALYSES FOR ENGINEERS	X Fall			
		... Spring	4	0	4

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Assist. Prof. Ali YILDIZ Assist. Prof. Abdulhamit Nakipoğlu	X Turkish ... English				
		X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory	-	-
	Quiz	-	-
	Assignment	-	-
	Project	-	-
	Midterm Exam	1	%40
	Final Exam	1	%60

Course Objectives and Goals	To improve students' ability to use mathematical and statistical methods in engineering.
Course Content	1- Matrices and Definitions 2- Matrix Operations 3- Determinant 4- Methods for Finding Determinants 5- Inverse Matrix 6- Methods for Finding Inverse Matrix 7- Linear Equation Systems 8- Solving Linear Equation Systems 9- Nonlinear Equation Systems 10- Intermediate Topics 11- Solving Nonlinear Equation Systems 12- Numerical Approximation (Curve Fitting) 13- Interpolation 14- Definitions Related to Statistics 15- Populations, Samples, Probability Distributions
Course Learning Outcomes	1. Learn matrices and determinants 2. Perform numerical integrations 3. Learn basic definitions in statistics
Recommended Resources	Lecture Notes



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Civil Engineering

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204364	Strength of Materials I	X Fall	4	0	4
		... Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Mehmet KAMANLI Prof. Dr. M. Sami DÖNDÜREN	X Turkish ... English				
		X		X	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	%40
	Final Exam	1	%60

Course Objectives and Goals	The aim of this course is to enable students to understand the behavior of structural elements under external forces, and to learn the fundamental concepts of stress, strain, and deformation. Strength of Materials I provides engineering students with the analytical skills needed to evaluate material capacity, safety limits, and design principles.
Course Content	<ol style="list-style-type: none"> 1- Introduction and Basic Concepts: Force, equilibrium, internal forces, stress concept 2- Normal Stress: Average and unit stress calculations 3- Stress State: Stress components, plane stress condition 4- Strain and Deformation: Elongation, unit strain, shear strain 5- Stress–Strain Relationships: Hooke’s Law, Poisson’s ratio 6- Applications of Stress–Strain Relationships 7- Axial Loading: Bars under tension and compression 8- Shear Force and Shear Stress: Effects of shear, connections and fasteners 9- Torsion: Torsion of circular shafts, shear stress distribution 10- Combined Loading: Axial, shear, and torsional effects together 11- Energy Methods and Deformation Analysis (overview) 12- Stress Safety and Strength Limits 13- General Review and Example Problems 14- Final Examination Review and Preparation
Course Learning Outcomes	<ul style="list-style-type: none"> • Explain the historical development of construction activities. • Identify and classify different types of constructions. • Analyze the relationship between science, technology, and engineering. • Understand the basic principles and ethical responsibilities of engineering.

	<ul style="list-style-type: none">• Summarize the evolution of civil engineering education in Turkey and worldwide.• Discuss the concepts of technology and sustainability in modern engineering practices.
Recommended Resources	Mukavemet- Prof. Dr. Yaşar KALTAKCI Cisimlerin Mukavemeti- Prof. Dr. Mustafa İNAN



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204372	BASIC COMPUTER SCIENCES (TSD 1)	x Fall			
		... Spring	x		4

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Research Assistant Dr. Tuba Özge NAKİPOĞLU	X Turkish X English				
			x	x	

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory		
	Quiz		
	Assignment	3	20
	Project		
	Midterm Exam	1	20
	Final Exam	1	60

Course Objectives and Goals	The aim of this course is to provide students with the ability to effectively use computers by understanding their basic operating principles, hardware and software components, operating systems, and office programs (such as Word, Excel, and PowerPoint). It is intended that students will be able to use computers as a problem-solving tool in engineering and other disciplines, gaining digital competence in information access, data processing, presentation preparation, and reporting processes.
Course Content	1-Computer Hardware–Software Components, Operating Systems 2-Microsoft Word Applications 1 – Report writing, formatting, course practice 3-Microsoft Word Applications 2 – Inserting tables and figures, document design and layout, adding references, course practice 4-Microsoft Word Applications 3 – Creating bibliography and table of contents, managing references and citation styles, course practice 5-Microsoft Excel Applications 1 – Excel program tabs 6-Microsoft Excel Applications 2 – Basic formulas, table creation, data organization, course practice 7-Microsoft Excel Applications 3 – Engineering calculations, creating and editing charts, course practice 8-Microsoft Excel Applications 4 – Data analysis, course practice 9-Midterm Exam 10-Microsoft PowerPoint Applications 1 – Microsoft PowerPoint tabs 11-Microsoft PowerPoint Applications 2 – Preparing effective presentations, visual design, course practice 12-Microsoft PowerPoint Applications 3 – Adding animations and presenting, course practice 13-Safe internet use, academic resource searching, email sending

	14-Term project presentations
Course Learning Outcomes	<p>Defines the basic hardware and software components of a computer and explains their functions.</p> <p>Effectively uses operating systems to manage files, folders, and data.</p> <p>Prepares engineering reports, technical writings, and official documents using Microsoft Word.</p> <p>Performs engineering calculations, creates charts, and analyzes data using Microsoft Excel.</p> <p>Prepares and delivers effective presentations for engineering projects using Microsoft PowerPoint.</p> <p>Effectively uses computer technologies in problem-solving, analysis, and decision-making processes in engineering.</p> <p>Applies principles of ethics, security, and data privacy in computer use.</p>
Recommended Resources	<p>Temel Bilgisayar Bilimleri Windows 7-10, Microsoft Word, Excel 2010- Musa KÜÇÜK</p> <p>Herkes İçin Excel Microsoft 365, Excel 2021, 2019 ve 2016 Uyumlu- Cenk İLTİR</p>



REPUBLIC OF TURKEY
KONYA TECHNICAL UNIVERSITY
Undergraduate Course Information Form

Faculty	Faculty of Engineering and Natural Sciences
Department	Civil Engineering
Division/Program	Construction Materials

Course Code	Course Name	Semester (X)	Credit		
			T	P	ECTS
1204402	CONSTRUCTION MATERIALS	... Fall	3	1	4
		X. Spring			

Instructor(s) (Title, Name Surname)	Language(s) of Instruction (X)	Course Type (X)		Mode of Course (X)	
		Must	Elective	Face to face	Online
Prof. Dr. Ülkü Sultan KESKİN	X Turkish	X		X	
	... English				

Assessment and Evaluation Methods			
	Evaluation Method	Number	Percentage (%)
	Laboratory	3	10
	Quiz		
	Assignment		
	Project		
	Midterm Exam	1	30
	Final Exam	1	60

Course Objectives and Goals	To introduce important building materials, especially concrete.
Course Content	<p>1-Principles of preparation of building materials test reports, Concrete as a Building Material: Definition of fresh and hardened concrete, expected performance from concrete, advantages and disadvantages of concrete</p> <p>2-Binders: Theory of binders, cement and its types, gypsum, lime, pozzolan</p> <p>3-Conducting cement experiments in the laboratory</p> <p>4-Concrete aggregates: classification of aggregates, properties of aggregates</p> <p>5-Aggregate sieve analysis test and specific gravity and water absorption tests on aggregate in the laboratory</p> <p>6-Properties of water used in concrete production</p> <p>7-Properties of concrete, Concrete mix calculations</p> <p>8-Technical trip to Building Material Fair</p> <p>9-Midterm exam</p> <p>10-Concrete making in the laboratory</p> <p>11-Technical trip to the cement factory</p> <p>12-Concrete strength test in the laboratory</p> <p>13-Technical trip to ready mixed concrete plant</p> <p>14-Control of Concrete</p> <p>15-Introduction of important building materials: Stones, metals, earth materials, organic polymers, wood, mortars</p>
Course Learning Outcomes	<p>1-Recognizes important building materials...</p> <p>2-Recognizes the materials that make up the concrete</p> <p>3-Learns the mixing calculation and production of concrete...</p> <p>4-Performs concrete experiments in the laboratory and prepares test reports.</p>

