

Dersin Adı		Course Name				
BİLGİSAYAR VE BİLGİ SİSTEMLERİNE GİRİŞ		INTRODUCTION TO COMPUTER AND INFORMATION SYSTEMS				
Kodu (Code)	Yarıyılı (Semester)	Kredisi (Local Credits)	AKTS Kredisi (ECTS Credits)	Ders Uygulaması, Saat/Hafta		
				Ders (Theoretical)	Uygulama (Resitation)	Laboratuar (Laboratory)
BIL 101E	1-2	1.5	2.5	1	0	1
Bolum/Program (Department/Program)		Ortak Havuz Common Pool				
Dersin Türü (Course Type)		Temel Bilim - Temel Mühendislik		Dersin Dili (Course Language)		İngilizce English
Dersin Önkoşulları (Course Prerequisites)		Yok/None				
Dersin Mesleki bileşene katkısı % (Course Category by Content, %)		Temel Bilim (Basic Science)	Temel Mühendislik (Engineering Science)	Mühendislik Tasarım (Engineering Design)	İnsan ve Toplum Bilim (General Education)	
		25	75%			
Dersin İçeriği (Course Description)		Bilgisayarlar, günlük yaşamda bilgisayarların kullanımı, Bilgisayar donanımı ve yazılımı, İşletim sistemleri, Giriş/çıkış ve depolama, Ağ ve internet, kablolu ve kablosuz haberleşme, Metin editörleri, elektronik tablolar, görselleştirme, veritabanları gibi yazılımlar, Bilgisayarlarla hesaplamada hata, algoritmalarla bilimsel problemlerin çözümüne giriş.				
		Computers, the usage of the computers in daily life, computer hardware and software, Operating systems, Input/Output and Storage, Web and the Internet, wired and wireless communication, Application softwares such as text editors, visualizations, spreadsheets, and databases, Error in computation, Introduction to scientific problem solving through algorithms.				
Dersin Amacı (Course Objectives)		1.Öğrencilere bilgisayarların temellerini tanıtmak. 2.Öğrencilere metin editörleri, elektronik tablolar ve veritabanları gibi önemli yazılım uygulamaları 3.İnternetin temel mimarisi ve teknolojilerini tanıtmak. 4.Algoritmalar geliştirmek için gereken temel becerileri tanıtmak				
		1.Introduce the basics of computers 2.Introduce students to important classes of software applications such as text editors, spreadsheets 3.Introduce the basic architecture and technologies of the Internet. 4.Introduce basic skills to develop algorithms				
Dersin Öğrenme Çıktıları (Course Learning Outcomes)		Bu dersi başarıyla geçen öğrenciler: 1. Bir bilgisayarın nasıl çalıştığını anlayabilecek 2. İşletim sistemleri ve derleyiciler gibi bilgisayarın diğer bileşenlerinin nasıl organize edildiğini ve bilgisayarın organizasyonu ile nasıl ilişkilendirildiğini genel bir seviyede anlayabilecek 3. İnternetin temel mimarisi ve teknolojilerini ve günlük yaşamdaki önemini anlayabilecek 4. Yazma, görselleştirme, hesaplama ve raporlama için gerekli temel becerileri geliştirecek 5. Komut dizi mimarisini anlayabilecek ve basit programlar yazabilecek 6. Programlama dillerinin önemini ve birbirinden farkını ayırdedebilecek				

	Student, who passed the course satisfactorily can: 1. Understand how a computer and its periferal devices operates 2. Understand on a broad level how other components, such as operating systems and compilers are organized and tie into the organization of the computer 3. Understand the basic architecture and technologies of the Internet and the importance in daily life 4. Develop the basic skills on writing, visualization, computing and reporting 5. Understand an instruction set architecture and write simple programs 6. Understand the importance and differences of the programming languages		
Ders Kitabı (Textbook)	Daley, 2009, Computers are your future, Prentice Hall.		
Diğer Kaynaklar (Other References)			
Ödevler ve Projeler (Homework & Projects)	1. Belirli bir konu hakkında araştırma yapma, bulguları kelime işlemci ve elektronik tablolaştırma yardımıyla raporlama, 2. Elektronik ortamda istenilen dosya biçiminde rapor gönderme, 3. Belli bir problemi çözmek için algoritma oluşturmak		
	1. Searching on a specific subject, writing a report which needed to use softwares such as word processor and spreadsheet applications, 2. Sending/uploading a document via ftp/e-mail in a desired file format, 3. Writing an algorithm to solve specific problem		
Laboratuar Uygulamaları (Laboratory Work)	Derste işlenen konuların aynı gün laboratuvarında uygulaması olacaktır. (Works in the laboratory sessions will be based on the material covered in the lecture.)		
Bilgisayar Kullanımı (Computer Use)	Bilgisayar kullanımı zorunludur. (Computer use in this course is compulsory)		
Diğer Uygulamalar (Other Activities)	Yok (None)		
Başarı Değerlendirme Sistemi (Assessment Criteria)	Faaliyetler (Activities)	Adedi - En az (Quantity - Minimum)	Değerlendirme Katkısı % (Effects on Grading %)
	Yılıçi Sınavları (Midterm Exams)		
	Kısa Sınavlar (Quizzes)	6	30%
	Ödevler (Homeworks)	3	30%
	Projeler (Projects)		
	Dönem Ödevi (Perm Paper)		
	Laboratuar Uygulaması (Laboratory Work)		
	Diğer Uygulamalar (Other Activities)		
	Final Sınavı (Final Exam)	1	40%

**COURSE  
PLAN**

Week	Topics	Outcomes
1	Basic Computer Knowledge, Input/Output, Storage and Data Processing	1-2
2	Introduction to Operating Systems	1-2
3	The Web, Networks	3
4	Internet, Wired/Wireless Communication	3
5	Basic Skills on Common Computer Software (Word processing)	4-5
6	Basic Skills on Common Computer Software (Spreadsheet applications)	4-5
7	Basic Skills on Common Computer Software (Spreadsheet applications)	4-5
8	Basic Skills on Common Computer Software, (Scientific Visualization)	4-5
9	Basic Skills on Common Computer Software, (Presentation preparation)	4-5
10	Introduction to Computing Numbers Error Analysis	1-5
11	Algorithms, Logic Structures, Recursive Structures	5
12	Algorithms, Logic Structures, Recursive Structures	5
13	Symbolic Calculation	4-5
14	Programming Languages	6

**Relationship between the Course and Mechanical Engineering Curriculum**

	Program Outcomes	Level of Contribution		
		1	2	3
a	An ability to apply knowledge of mathematics, science, and engineering on mechanical engineering problems			
b	An ability to design and conduct experiments, as well as to analyze and interpret data and use modern tools and equipment.			
c	An ability to select, develop and/or design a system, component, or process to meet desired performance, manufacturing capabilities and economic requirements.			
d	An ability to function on and/or develop leadership in multi-disciplinary teams.			
e	An ability to identify, formulate, and solve mechanical engineering problems.			
f	An understanding of professional and ethical responsibility			
g	An ability for effective written and oral communication in Turkish and English.		X	
h	An ability to understand and comment on the impact of engineering solutions in a national and global context.			
i	A recognition of the need for, and an ability to engage in life-long learning			
j	A knowledge of contemporary issues in mechanical engineering			
k	An ability to use the techniques, skills, and modern engineering tools , such as computer programs, necessary for engineering design and analysis and use modern information systems			X
l	A detailed knowledge of and experience on a specific application field of mechanical engineering			

**1: None, 2. Partial, 3. Full**

<u>Düzenleyen (Prepared by)</u> Dr. Hikmet Arslan	<u>Tarih (Date)</u> 09.07.2009	<u>İmza (Signature)</u>
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