



## Ders Bilgi Formu / Course Information Sheet

Ders Kodu /  
Course Code  
COM102Ders Adı / Course Name  
INFORMATION TECHNOLOGIES 2Kredi /  
Credit  
3AKTS /ECTS  
4

Önkoşul / Pre-requisite: COM101

Ders Dili / Language:  
ENGLISHDers Türü /Course Type:  
COMPULSORYÖğretim Ortamı / Mode of Instruction:  
DISTANCE EDUCATION

Haftalık Ders Saati / Weekly Hours	Sınıf Saati / Class Hours	Laboratuva r / Laboratory	Uygulama / Practicum	Öğretim Oturumları / Learning Sessions				
				PÇ / PS	P / C	D / R	Ö / T	
	0		3	0	2	2	2	2

Öğretim Çıktıları /  
Learning Outcomes

Bu dersin sonunda öğrenciler:

After the completion of this course, the student will be able to:

- ▶ Explains the basic concepts of information technologies.
- ▶ Discusses the changes of information technologies over time.
- ▶ Recognizes the innovations that can be made by using information technologies.
- ▶ Describes interdisciplinary careers developed by computer science.
- ▶ Discusses ethical and unethical behavior in the use of information and technology.
- ▶ Evaluates the importance of intellectual property rights.
- ▶ Discusses the individual and social effects caused by privacy and security problems.
- ▶ Explains threats to information security and privacy.
- ▶ Evaluates the security level of various environments.
- ▶ Describes the measures that can be taken against structures that can pose a threat to security.
- ▶ Separates a problem into sub-problems.
- ▶ Designs different algorithms to solve a problem.
- ▶ Creates the flow chart of the designed algorithm.
- ▶ Tests the designed algorithm and debug errors.
- ▶ Reveals the relationship between algorithm design and programming language.
- ▶ Recognizes the interface and features of the programming tool.
- ▶ Converts the algorithm developed to solve a specific problem into an error-free program.
- ▶ Creates a syntax suitable for a given problem.
- ▶ Tests and extracts a given syntax.
- ▶ Uses variables for solving the problem.
- ▶ Uses conditional statements to solve the problem.
- ▶ Uses loops for the solution of the problem.
- ▶ Uses functions for solving the problem.
- ▶ Develops a unique product for the solution of a particular problem.
- ▶ Creates presentations using graphics and animations for a specific purpose.
- ▶ Designs a mind map for a specific purpose.
- ▶ Develops graphs and information graphics consisting of numerical data.
- ▶ Designs a poster using a poster creation program.
- ▶ Creates a product using page design programs.
- ▶ Produces collaborative projects.
- ▶ Explains the basic concepts of animation.
- ▶ Creates the scenario of the animation with the help of storyboards.
- ▶ Recognizes the interface and features of the animation program used.

	<ul style="list-style-type: none"> <li>▶ Creates animation for a specific purpose.</li> <li>▶ Explains the basic concepts of three-dimensional design.</li> <li>▶ Recognizes the interface and features of the three-dimensional design program used.</li> <li>▶ Makes simple three dimensional drawings.</li> <li>▶ Makes model design.</li> <li>▶ Develops original design product for a specific purpose.</li> <li>▶ Describes three-dimensional printers and areas where three-dimensional printers are used.</li> <li>▶ Share the product developed by using collaborative working Environments.</li> </ul>
<b>Ders Tanımı / Course Description</b>	The course is offered to all faculties as a general common course. It involves using modern and basic information technologies effectively.
<b>Dersin Amaçları / Course Objectives</b>	<ol style="list-style-type: none"> <li>1. Being individuals who understand technological concepts, systems and processes as digital citizens,</li> <li>2. Using information technologies effectively and in accordance with their purpose,</li> <li>3. Accessing internet based services, researching and using the services,</li> <li>4. To create a general understanding and technical knowledge about computer science,</li> <li>5. To acquire and develop problem solving and computational thinking skills,</li> <li>6. To follow and evaluate the reasoning process,</li> <li>7. As a part of the learning process, they will be able to acquire cooperative work skills to benefit and share what they have learned,</li> <li>9. Developing an understanding of algorithm design and expressing them verbally and visually,</li> <li>10. Selecting the appropriate programming approach to solve the problems and implementing them,</li> <li>11. Creating technical knowledge on programming,</li> <li>12. Use at least one of the programming languages,</li> <li>13. Carrying out studies on product design and management,</li> <li>14. To solve the problems encountered in daily life (problems faced by elderly and disabled individuals, etc.) developing innovative and original projects,</li> <li>15. Aims to gain awareness about lifelong learning.</li> </ol>
<b>Kullanılan Materyaller / Textbooks and/or References</b>	<ol style="list-style-type: none"> <li>1 Course materials shared on UZEM</li> <li>2 Uzunboylu, H. (ed.) (2017). Information technologies. Ankara: Pegem Academy Publishing.</li> </ol>
<b>Ders İçeriği / Course Content</b>	<ol style="list-style-type: none"> <li>1. Information Technologies in Daily Life importance</li> <li>2. Information Technologies in Daily Life importance</li> <li>3. Ethical values</li> <li>4. Privacy and Security</li> <li>5. Problem Solving Concepts and Approaches</li> <li>6. Problem Solving Concepts and Approaches</li> <li>7. Programming</li> <li>8. Programming</li> <li>9. Presentation and Visualization Programs</li> <li>10. Creating Two-Dimensional Animation</li> <li>11. Creating Two-Dimensional Animation</li> <li>12. Three Dimensional Design Programs</li> <li>13. Three Dimensional Design Programs</li> </ol>