



2023-2024 Academic Year
List of Courses Offered in Foreign Language
2023-2024 Akademik Yılı
Yabancı Dilde Açılacak Dersler Listesi

Faculty of Engineering
Mühendislik Fakültesi

	Department <i>Bölüm</i>	Course Code <i>Ders Kodu</i>	ECTS <i>AKTS</i>	Course Title <i>Dersin Adı</i>	Semester <i>Dönem</i>	Course Content <i>Dersin İçeriği</i>	Academic Staff <i>Dersi Veren Öğretim Elemanı</i>	Online Available <i>Çevrimiçi</i>
1	Computer Engineering	CSE 102T	4	Computer Programming II	Bahar / Spring	This course will begin with an introduction to object oriented programming and its differences from traditional sequential programming. The discussion will then focus on the particulars of how to design programs in the object oriented paradigm.	Dr.Öğr.Üyesi JOSEPH WILLIAM LEDET	No
2	Computer Engineering	CSE 102L	4	Computer Programming II Laboratory	Bahar / Spring	This course will begin with an introduction to object oriented programming and its differences from traditional sequential programming. The discussion will then focus on the particulars of how to design programs in the object oriented paradigm.	Dr.Öğr.Üyesi JOSEPH WILLIAM LEDET	No
3	Computer Engineering	CSE 204	6	Database Management Systems	Bahar / Spring	This course will begin with an introduction to historical methods for data storage and manipulation. The discussion will then focus on the development of a relational database model for use in a software system. The methodology for developing a database from conceptual to logical to physical database will be discussed by using tools such as E-R modeling and normalization.	Dr.Öğr.Üyesi JOSEPH WILLIAM LEDET	No
4	Computer Engineering	CSE 206	5	Computer Organization	Bahar / Spring	Histor of Computers, cache memory, computer arithmetic, integer representation, FP representation, Instruction sets, addressing modes, processor structure and functions, Assembly Language, and Pipelining.	Doç.Dr. TANER DANIŞMAN	No
5	Computer Engineering	CSE 208	6	Computer Networks	Bahar / Spring	Introduction to networks, protocols, packages, IP, NAT, DNS, routing, BGP, virtual circuits, TCP, Web, p2p, video, QoS, security, cryptology, physical layer, data link layer.	Dr.Öğr.Üyesi MUSTAFA BERKAY YILMAZ	No
6	Computer Engineering	CSE 222	6	Discrete Mathematics II	Bahar / Spring	Combinations, permutations, logic, mathematical induction, pigeonhole principle, inclusion-exclusion, generating functions, graphs and graph theory	Dr.Öğr.Üyesi MURAT AK	No
7	Computer Engineering	CSE 234	6	Mobile Programming	Bahar / Spring	This course aims to provide programming skills for mobile environments. Knowledge on Java and Kotlin, which are the most used programming languages for this purpose, will be given as well with project examples.	Dr.Öğr.Üyesi MUSTAFA BERKAY YILMAZ	No
8	Computer Engineering	CSE 236	6	Web Programming	Bahar / Spring	Hands on learning of the most commonly used web development technologies for basic web applications including HTML, CSS, Javascript, PHP, Codelgnator, JDBC, Client-Server Architecture.	Prof.Dr. MELİH GÜNAY	No
9	Computer Engineering	CSE 332	6	Software Engineering	Bahar / Spring	This course gives students experience designing, implementing, testing, and debugging large programs. Students will also get advanced Java programming experience; covering topics such as inheritance, multithreading, networking, database programming, and web development.	Doç.Dr. ÜMİT DENİZ ULUŞAR	No
10	Computer Engineering	CSE 334	6	Programming Languages	Bahar / Spring	Language evaluation criteria. Describing syntax and semantics. Tools for constructing lexical and syntactical analyzers. Names, bindings, type checking, and scopes. Data types. Expressions and the assignment statement. Statement-level control structures. Subprograms. Abstract data types. Concurrency. Exception handling. Functional programming languages. Logic programming languages.	Dr.Öğr.Üyesi MURAT AK	No
11	Computer Engineering	CSE 358	6	Introduction to Artificial Intelligence	Bahar / Spring	Intelligent Agents, Solving Problems by Uninformed and Informed Search Methods, Constraint Satisfaction Problems, Adversarial Search, Markov Decision Process, Reinforcement Learning	Doç.Dr. ALPER BİLGE	No
12	Computer Engineering	CSE 328	6	Internet of Things	Bahar / Spring	Internet communication methods and protocols, Data Transmission Mechanisms. Sensors and Mini Computers as Raspberry PI and Arduino.	Doç.Dr. TANER DANIŞMAN	No
13	Computer Engineering	CSE 348	6	Introduction to Image Processing	Bahar / Spring	Image acquisition, sampling and quantization. Spatial domain processing. Image enhancement. Texture analysis. Edge detection. Frequency domain processing. Color image processing. Mathematical morphology. Image segmentation and region representations. Statistical and structural scene descriptions. Applications.	Dr.Öğr.Üyesi MUSTAFA BERKAY YILMAZ	No
14	Computer Engineering	CSE 472	6	Information Systems Security	Bahar / Spring	Asymmetric and symmetric encryption, stream ciphers, modes of encryption, public key cryptosystems, digital signatures, RSA, El Gamal encryption, elliptic curve cryptosystems, cryptographic hash functions, MACs, key establishment	Dr.Öğr.Üyesi MURAT AK	No
15	Computer Engineering	CSE 406	6	Scientific Programming	Bahar / Spring	The course will begin with an overview to programming techniques. Then, data analysis methods will be explained. The Matplotlib, a widely used library will be examined and data visualization methods will be explained. Programming examples and applications will be developed with Matlab and Phyton.	Dr.Öğr.Üyesi HÜSEYİN GÖKHAN AKÇAY	No

