



2026-2027 Academic Year
List of Courses Offered in Foreign Language
2026-2027 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	Artificial Intelligence and Data Engineering	AIE 105	2	Introduction to AI and Data Engineering	Güz / Fall	Introductory overview of artificial intelligence and data engineering. Core concepts and terminology, the AI and data project lifecycle, types of machine learning, data sources and pipelines, common tools, and ethical considerations, together with the role and responsibilities of an AI and data engineer through introductory hands-on exercises.	Asst. Prof. Dr. Mustafa Berkay Yılmaz	No
2	Artificial Intelligence and Data Engineering	AIE 205	4	Fundamentals of Data Science	Güz / Fall	Foundations of data science. Data collection, cleaning and wrangling, exploratory data analysis, descriptive statistics, data visualization, feature engineering, and an introduction to predictive modeling using modern Python data-science libraries.	Assoc. Prof. Dr. Taner Danışman	No
3	Artificial Intelligence and Data Engineering	AIE 335	6	Data Pipelines and Infrastructure	Güz / Fall	Design and operation of data pipelines and processing infrastructure. Batch and streaming ingestion, ETL/ELT workflows, data storage and warehousing, workflow orchestration and scheduling, and the construction of scalable, reliable data platforms.	Prof. Dr. Alper Bilge	No
4	Artificial Intelligence and Data Engineering	AIE 258	6	Foundations of AI and Machine Learning	Bahar / Spring	Core principles of artificial intelligence and machine learning. Supervised and unsupervised learning, regression and classification, model training, evaluation and validation, overfitting and regularization, and foundational algorithms with practical implementation.	Prof. Dr. Alper Bilge	No
5	Artificial Intelligence and Data Engineering	AIE 316	6	Cloud-Native AI	Bahar / Spring	Building and deploying AI systems on cloud-native infrastructure. Containers and orchestration, scalable model serving, MLOps pipelines, monitoring and observability, and cost- and performance-aware deployment of machine-learning workloads in the cloud.	Research Asst. Dr. Taha Yiğit Alkan	No
6	Artificial Intelligence and Data Engineering	AIE 366	6	Agentic AI	Bahar / Spring	Design and development of agentic AI systems. Large language model based agents, tool use and function calling, planning and reasoning, memory, multi-agent coordination, and the evaluation, reliability and safety of autonomous AI agents.	Prof. Dr. Melih Günay	No