Vocational School / Computer Programming

2024 - 2025 Academic Year

ARTIFICIAL INTELLIGENCE

Syllabus

Course Description					
Name	**Code**	**Semester**	**T+A Hour**	**Credit**	**ECTS**
ARTIFICIAL INTELLIGENCE	BPR2214994	Spring Semester	3+0	3	5

Prerequisites Courses	
Recommended Elective Courses	
Language of Instruction	Turkish
Course Level	Short Cycle (Associate's Degree)
Course Type	Elective
Course Coordinator	Lect. Beyza KOYULMUŞ
Name of Lecturer(s)	Lect. Beyza KOYULMUŞ
Assistant(s)	
Aim	The aim of this course is to introduce and teach the fundamentals of Artificial Intelligence applications.
Course Content	This course contains; Introduction to Artificial Intelligence,Philosophy and History of Artificial Intelligence,Basic Concepts,Problem Solving with Artificial Intelligence,Machine Learning,Unsupervised, Supervised and Reinforcement Learning,Big Data and Computing Technology,Intelligent Agents,Deep Learning,Neural Networks,Natural Language Processing,Computer Vision,Predictive models and sample applications,The Future of Artificial Intelligence.

Course Learning Outcomes	**Teaching Methods**	**Assessment Methods**
Knows the concepts of Artificial Intelligence.	10, 16, 9	A, E, H
Knows the types of machine learning.	10, 16, 9	A, E
Knows the application areas of machine learning.	10, 16, 9	A, E, F
Knows the concepts of big data and computing technology.	16, 23, 9	A, E, F, G
Conducts current research in the field of artificial intelligence	16, 9	A, E, G
Understands the basics of artificial intelligence	10, 16, 9	A, E

Teaching Methods	10: Discussion Method, 16: Question - Answer Technique, 23: Concept Map Technique, 9: Lecture Method
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task, G: Quiz, H: Performance Task

Lecture Schedule

Sequence	**Topics**	**Preliminary Preparation**
1	Introduction to Artificial Intelligence	
2	Philosophy and History of Artificial Intelligence	
3	Basic Concepts	
4	Problem Solving with Artificial Intelligence	
5	Machine Learning	
6	Unsupervised, Supervised and Reinforcement Learning	
7	Big Data and Computing Technology	
8	Intelligent Agents	
9	Deep Learning	
10	Neural Networks	
11	Natural Language Processing	
12	Computer Vision	
13	Predictive models and sample applications	
14	The Future of Artificial Intelligence	

Evaluation Methods	**Weight(%)**
Midterm Exam	40
General Exam	60

Resources