



Jordan University of Science and Technology
Faculty of Computer & Information Technology
Computer Engineering Department

CPE597 Special Topics In Computer Engineering

First Semester 2020-2021

Course Catalog

3 Credit Hours. This course is an introduction to machine learning covering supervised and unsupervised learning. Supervised learning will focus on regression problems and how algorithms, such as gradient descent, can be used for fitting model parameters. The course then moves to multiple classification algorithms, such as logistic regression, support vector machines, K-nearest neighbor. Example algorithms on dimensionality reduction, such as principal component analysis, will also be discussed. Artificial neural networks and their use in applications such as, image processing and natural language processing will also be covered. In the unsupervised learning, the course will focus on clustering. Throughout the course, students will write code to gain practice in applying the course concepts.

Instructor

Name	Dr. ANAS BSOUK
Office Location	A1 L3
Office Hours	
Email	aabsoul1@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Sun, Tue : 08:30 - 10:00
Room: منصة الكترونية

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understanding the meaning of supervised and unsupervised learning and learning famous regression, classification, and clustering algorithms combined with writing code to apply them. [2A, 1B, 1C, 1E, 2SO1, 1SO2, 1SO6, 1SO7]	100%	Midterm exam, assignments, and quizzes, Final Exam

Relationship to Program Student Outcomes (Out of 100%)																	
A	B	C	D	E	F	G	H	I	J	K	SO1	SO2	SO3	SO4	SO5	SO6	SO7
20	10	10		10							20	10				10	10

Evaluation	
Assessment Tool	Weight
Midterm exam, assignments, and quizzes	50%
Final Exam	50%

Date Printed: 2021-02-14