

**List of Courses Must be Taken Simultaneously Hacettepe University
Engineering Faculty
Artificial Intelligent Engineering Department**

AIN 212 Elements of Data Science	AIN 214 Data Science Lab.
AIN 311 Foundations of Machine Learning	AIN 313 Machine Learning Lab.
AIN 412 Introduction to Medical Image Analysis	AIN 414 Practicum in Medical Image Analysis
AIN 430 Fundamentals of Image Processing	AIN 432 Practicum in Image Processing
AIN 431 Introduction to Computer Vision	AIN 433 Practicum in Computer Vision
AIN 440 Introduction to Natural Language Processing	AIN 442 Practicum in Natural Language Processing
AIN 420 Introduction to Deep Learning	AIN 422 Practicum in Deep Learning
AIN 423 Data Intensive Applications	AIN 425 Practicum in Data Intensive Applications
AIN 424 Introduction to Deep Reinforcement Learning	AIN 426 Practicum in Deep Reinforcement Learning
AIN 427 Introduction to Data Mining	AIN 429 Data Mining Laboratory
AIN 451 Introduction to Robotics	AIN 453 Practicum in Robotics
AIN 455 Introduction to Human Robot Interaction	AIN 457 Practicum in Human Robot Interaction