Courses Tree

Faculty: Computer Sciences and Informatics

Major: AI and Data Science

Department: Computer Science and information Systems

Program: Bachelor

Issue Date: 2023/2024

First Year [33] Cr. Hr.

First Semester

- Calculus (1)
- Introduction to Programming + Laboratory
- University Elective Requirements
- Fundamentals of Information Technology
- University Core Requirements

Second Semester

- Linear Algebra
- Object Oriented Programming + Laboratory
- University Elective Requirements
- Databases + Laboratory
- Introduction to Data Science

Second Year [36] Cr. Hr.

First Semester

- Discrete Mathematics
- Data Structures
- Advanced Programming
- Systems Analysis and Design
- Websites Design
- Principles of statistics and probability

Second Semester

- Algorithms Design and Analysis
- Artificial Intelligence
- Data Science and AI Programming
- University Core Requirements
- Data Engineering and Analysis
- Statistical Methods

Third Year [33] Cr. Hr.

First Semester

- Operating Systems
- Machine Learning
- Natural Language Processing
- University Core Requirements
- Knowledge Representation and Reasoning
- University Elective Requirements

Second Semester

- University Core Requirements
- Deep Learning
- Data Mining
- Program Elective Requirements

  Complete 90 CH
- Data Visualization

  Complete 80 CH

Fourth Year [30] Cr. Hr.

First Semester

- University Core Requirements
- Data Security
- Intelligent Mobile Robotics
- Applied Graduation Project (1)
- Field Training on AI and Data Science
- Program Elective Requirements

Second Semester

- Program Elective Requirements
- University Core Requirements
- Applied Graduation Project (2)
- Communication and Writing Skills
- Big and Open Data