1st Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
BBM101	Introduction to Programming I	3 0 3	6	English
BBM103	Introduction to Programming Laboratory I	0 2 1	4	English
MAT123	Mathematics I	4 2 5	6	English
FİZ137	Physics I	4 0 4	5	English
AIN101	Freshman Seminar	1 0 1	2	English
İNG111	Language Skills I	3 0 3	3	English
TKD103	Turkish I	2 0 2	2	Turkish
BEB 650	[Basic Information and Communication Technologies](#)	0 2 1	2	English

2nd Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
BBM102	Introduction to Programming II	3 0 3	8	English
BBM104	Introduction to Programming Laboratory II	0 2 1	4	English
MAT124	Mathematics II	4 2 5	6	English
FİZ138	Physics II	4 0 4	5	English
FİZ117	General Physics Lab.	0 3 1	2	English
İNG112	Language Skills II	3 0 3	3	English
TKD104	Turkish II	2 0 2	2	Turkish

3rd Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
BBM201	Data Structures	3 0 3	5	English
BBM203	Software Laboratory I	0 2 1	2	English
BBM205	Discrete Structures	3 0 3	5	English

İST292	Statistics	3 0 3	5	English
AİT203	Atatürk's Princ. And The History of The Revol. I	2 0 2	2	Turkish
MÜH103	Occupational Health and Safety I	1 0 1	1	Turkish
AIN212	Elements of Data Science	3 0 3	6	English
AIN214	Data Science Lab.	0 2 1	4	English

4th Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
BBM202	Algorithms	3 0 3	4	English
BBM204	Software Laboratory II	0 2 1	2	English
BBM242	Computer Systems	3 0 3	4	English
AIN211	Principles of Artificial Intelligence	3 2 4	6	English
MAT254	Fundamental Linear Algebra	3 0 3	4	English
AIN200	Computers and Ethics	3 0 3	3	English
AİT204	Atatürk's Princ. And The History of The Revol. II	2 0 2	2	Turkish
MÜH104	Occupational Health and Safety II	1 0 1	1	Turkish
	Nontechnical Elective	3 0 3	4	

5th Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
AIN300	Internship I	0 4 2	5	English
AIN311	Foundations of Machine Learning	3 0 3	6	English
AIN313	Machine Learning Lab.	0 2 1	4	English
AIN	AIN Technical Elective	3 0 3	6	English
BBM	BBM Technical Elective	3 0 3	6	English
	Nontechnical Elective	3 0 3	3	

6th Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
AIN312	Formal Languages and Automata Theory	3 0 3	6	English
AIN	AIN Technical Elective	3 0 3	6	English
AIN	AIN Technical Elective Lab.	0 2 1	4	English
AIN	AIN Technical Elective	3 0 3	6	English
AIN	AIN Technical Elective Lab.	0 2 1	4	English
	Nontechnical Elective	3 0 3	4	

7th Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
AIN400	Internship II	0 4 2	5	English
AIN401	Senior Seminar	0 2 1	1	English
AIN491	Project I	3 2 4	4	English
AIN	AIN Technical Elective	3 0 3	6	English
AIN	AIN Technical Elective	3 0 3	6	English
AIN	AIN Technical Elective Lab.	0 2 1	4	English
	Nontechnical Elective	3 0 3	4	

8th Semester

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
AIN492	Project II	3 2 4	6	English
AIN	AIN Technical Elective	3 0 3	6	English
AIN	AIN Technical Elective Lab.	0 2 1	4	English
AIN	AIN Technical Elective	3 0 3	6	English

AIN	AIN Technical Elective Lab.	0 2 1	4	English
	Nontechnical Elective	3 0 3	4	

AIN Technical Electives

Perception and Language Cluster

- 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 434 Fundamentals of Computational Photography
- AIN 440 Introduction to Natural Language Processing
- AIN 442 Practicum in Natural Language Processing
- AIN 441 Fundamentals of Speech and Voice Recognition

Big Data and Machine Learning Cluster

- AIN 420 Introduction to Deep Learning
- AIN 422 Practicum in Deep Learning
- AIN 421 Fuzzy Logic
- 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 447 Fundamentals of Text Mining
- AIN 428 Information Retrieval
- AIN 461 Logic Programming

Decision Making and Robotics Cluster

- AIN 450 Dynamical Systems
- AIN 462 Fundamentals of Decision Making
- AIN 451 Introduction to Robotics
- AIN 453 Practicum in Robotics

- AIN 454 Fundamentals of Cognitive Robotics

- AIN 463 Autonomous Multiagent Systems

- AIN 455 Introduction to Human Robot Interaction

- AIN 457 Practicum in Human Robot Interaction

Medical Artificial Intelligence Cluster

- AIN 411 Introduction to Bioinformatics

- AIN 412 Introduction to Medical Image Analysis

- AIN 414 Practicum in Medical Image Analysis

- AIN 413 Machine Learning for HealthCare

Non-Technical Electives

- Below, you can find a sample of non-technical elective courses offered at Hacettepe University.

- Please note that this is only a small selection of all available non-technical elective courses. Unfortunately, it is not possible to provide a complete list of such courses at the moment. For each department you are interested in taking a course, you can visit the department's website (or ask them in person or by phone) to see a list of the courses they offer for you.

- You can also take courses from SEC pool as non-technical electives. To see the complete list of SEC courses offered each semester, you may visit http://www.secmeli.hacettepe.edu.tr/. Students enrolled in or after Fall 2017-18 semester can take at most 3 SEC courses during their undergraduate studies.

- There are no language restrictions for non-technical electives. That is, you can register for non-technical electives that are offered in Turkish (or other languages).

Course Code	Course Name	Theoretic-Practical-Credit	ECTS Credit	Course Language
EKO115	General Economy	3 0 3	4	Turkish
MAN321	Small Business Management and Entrepreneurship	3 0 3	4	Turkish
PSİ101	Introduction to Psychology	3 0 3	6	Turkish
SOS101	Introduction to Sociology	3 0 3	6	Turkish
SOS261	Communication Sociology	3 0 3	5	Turkish
FEL123	Introduction to Logic	3 0 3	4	Turkish
MTK203	Differential Equations	4 0 4	4	Turkish
MTK403	Introduction to Game Theory	3 0 3	5	Turkish
KAY465	Informantion Tech. at Public Management	3 0 3	4	Turkish

IYB332 General Management	3 0 3	5	Turkish
ANT202 Introduction to Social Anthropology	3 0 3	5	Turkish
FEL110 Introduction to Philosophy	3 0 3	4	Turkish
FEL122 Logic I	3 0 3	5	Turkish
MTK479 Introduction to Cryptography	3 0 3	7	Turkish
KAY124 Social Psychology	3 0 3	5	Turkish
KAY246 Labour and Social Security Law	3 0 3	4	Turkish
KAY486 Commercial Law	3 0 3	5	Turkish