

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
BBM105	Introduction to Computer Engineering	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

BBM231	Logic Design	3 0 3	5	English
BBM233	Logic Design Lab	0 2 1	2	English
İST299	Probability	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
	Nontechnical Elective	3 0 3	3	

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
BBM234	Computer Organization	3 0 3	4	English
MAT254	Fundamentals of Linear Algebra	3 0 3	4	English
ELE296	Introduction to Electronic Circ. and Syst.	3 0 3	5	English
İST292	Statistics	3 0 3	5	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	3	

5th Semester

Course Code	Course Name	Theoretic- Practical-Credit	ECTS Credit	Course Language
BBM301	Programming Languages	3 0 3	4	English
BBM325	Internship I	0 4 2	5	English
BBM341	Systems Programming	3 0 3	4	English
BBM371	Data Management	3 0 3	4	English
BBM	Technical Elective	3 0 3	6	English

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

6th Semester

Course Code	Course Name	Theoretic- Practical-Credit	ECTS Credit	Course Language
BBM342	Operating Systems	3 0 3	5	English
BBM382	Software Engineering	3 0 3	5	English
BBM384	Software Engineering Lab.	0 2 1	4	English
BBM	Technical Elective	3 0 3	6	English
BBM	Technical Elective	3 0 3	6	English
	Nontechnical Elective	3 0 3	4	

7th Semester

Course Code	Course Name	Theoretic- Practical-Credit	ECTS Credit	Course Language
BBM425	Internship II	0 4 2	5	English
BBM427	Technology Seminars I	0 2 1	1	English
BBM479	Design Project I	0 4 2	4	English
BBM	Technical Elective	3 0 3	6	English
BBM	Technical Elective	3 0 3	6	English
BBM	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
BBM428	Technology Seminars II	0 2 1	1	English
BBM480	Design Project II	0 6 2	6	English

BBM	Technical Elective	3 0 3	6	English
BBM	Technical Elective	3 0 3	6	English
BBM	Technical Elective Lab.	0 2 1	4	English
BBM	Technical Elective Lab.	0 2 1	4	English
	Nontechnical Elective	3 0 3	3	

Technical Electives with Complementary Practicum (Laboratory)

Course Code	Course Name	Semester	Theoretic- Practical- Credit	ECTS Credit	Course Language
BBM406	Fundamentals of Machine Learning	Spring	3 0 3	6	English
BBM409	Machine Learning Laboratory	Spring	0 2 1	4	English
BBM412	Computer Graphics	Spring	3 0 3	6	English
BBM413	Fundamentals of Image Processing	Fall	3 0 3	6	English
BBM414	Computer Graphics Laboratory	Spring	0 2 1	4	English
BBM415	Image Processing Laboratory	Fall	0 2 1	4	English
BBM416	Fundamentals of Computer Vision	Spring	3 0 3	6	English
BBM418	Computer Vision Laboratory	Spring	0 2 1	4	English
BBM421	Game Technologies	Fall	3 0 3	6	English
BBM422	Mobile Computing	Spring	3 0 3	6	English
BBM423	Game Technologies Laboratory	Fall	0 2 1	4	English
BBM424	Mobile Computing Laboratory	Spring	0 2 1	4	English
BBM432	Embedded Systems	Spring	3 0 3	6	English
BBM433	Microprocessors	Fall	3 0 3	6	English
BBM434	Embedded Systems Laboratory	Spring	0 2 1	4	English
BBM436	Microprocessors Laboratory	Spring	0 2 1	4	English
BBM444	Fundamentals of Computational Photography	Spring	3 0 3	6	English
BBM446	Computational Photography Laboratory	Spring	0 2 1	4	English

BBM451 Computer Networks	Fall	3 0 3	6	English
BBM452 Data Communications	Spring	3 0 3	6	English
BBM453 Computer Networks Laboratory	Fall	0 2 1	4	English
BBM458 Wireless and Mobil Networks	Fall	3 0 3	6	English
BBM459 Secure Programming Laboratory	Fall	0 2 1	4	English
BBM460 Wireless and Mobil Networks Laboratory	Fall	0 2 1	4	English
BBM461 Secure Programming	Fall	3 0 3	6	English
BBM463 Information Security	Fall	3 0 3	6	English
BBM465 Information Security Laboratory	Fall	0 2 1	4	English
BBM467 Data Intensive Applications	Fall	3 0 3	6	English
BBM469 Data Intensive Applications Laboratory	Fall	0 2 1	4	English
BBM471 Database Management Systems	Fall	3 0 3	6	English
BBM472 Geographic Information Systems	Spring	3 0 3	6	English
BBM473 Database Laboratory	Spring	0 2 1	4	English
BBM474 Geographic Information Systems Laboratory	Spring	0 2 1	4	English
BBM481 Software Development	Fall	3 0 3	6	English
BBM482 Software Quality Assurance	Spring	3 0 3	6	English
BBM483 Software Development Laboratory	Fall	0 2 1	4	English
BBM484 Software Quality Assurance Laboratory	Spring	0 2 1	4	English
BBM488 Web Services Laboratory	Spring	0 2 1	4	English
BBM490 Fundamentals of Web Architecture	Spring	3 0 3	6	English
BBM491 Personal Software Process	Fall	3 0 3	6	English
BBM492 Team Software Process	Spring	3 0 3	6	English
BBM493 Personal Software Process Laboratory	Fall	0 2 1	4	English
BBM494 Team Software Process Laboratory	Spring	0 2 1	4	English
BBM495 Introduction to Natural Language Processing	Fall/Spring	3 0 3	6	English

BBM497 Introduction to Natural Language Processing Laboratory	Fall/Spring	0 2 1	4	English
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Other Technical Electives

Course Code	Course Name	Semester	Theoretic- Practical- Credit	ECTS Credit	Course Language
BBM401	Automata Theory and Formal Languages	Fall	3 0 3	6	English
BBM402	Theory of Computation	Spring	3 0 3	6	English
BBM403	Combinatorics and Graph Theory	Fall	3 0 3	6	English
BBM404	Fundamentals of Compiler Construction	Spring	3 0 3	6	English
BBM405	Fundamentals of Artificial Intelligence	Fall	3 0 3	6	English
BBM407	Fuzzy Logic	Fall	3 0 3	6	English
BBM408	Algorithm Analysis	Spring	3 0 3	6	English
BBM410	Dynamical Systems	Spring	3 0 3	6	English
BBM411	Fundamentals of Bioinformatics	Fall	3 0 3	6	English
BBM431	Advanced Computer Architectures	Fall	3 0 3	6	English
BBM441	Introduction to High Performance Computing	Fall/Spring	3 0 3	6	English
BBM442	Parallel Processing	Spring	3 0 3	6	English
BBM443	Fundamentals of Blockchain	Fall/Spring	3 0 3	6	English
BBM456	Computer and Network Security	Spring	3 0 3	6	English
BBM462	Social and Economic Networks	Fall	3 0 3	6	English
BBM475	Management Information Systems	Fall	3 0 3	6	English
BBM476	Artificial Neural Networks	Fall/Spring	3 0 3	6	English
BBM477	Sampled Data Systems	Fall/Spring	3 0 3	6	English
BBM485	Software Architectures	Fall	3 0 3	6	English
BBM486	Design Patterns	Spring	3 0 3	6	English

BBM498 Software Requirements	Fall	3 0 3	6	English
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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