

Information Systems Engineering

Study Plan

First Cycle (Bachelor's Degree)

S: Semester, Y: Year, T: Theory, L: Laboratory, P: Practice, H: Hour

Please, click on the courses for more information.

2020/2021 Course List

1st Semester

Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
AIT101	Atatürk's Principles and History of Turkish Revolution I (de)	Compulsory Course	Turkish	2	0	0	2	2
YDB101	English I	Compulsory Course	Turkish	4	0	0	4	4
TDB101	Turkish Language I (de)	Compulsory Course	Turkish	2	0	0	2	2
TKN103	Physics I	Compulsory Course	Turkish	3	2	0	5	5
TKN101	Mathematics I	Compulsory Course	Turkish	4	0	1	5	5
TBL103	Algorithm and Programing- I	Compulsory Course	Turkish	3	0	0	3	4
TBL101	Introduction To Information System Engineering	Compulsory Course	Turkish	2	0	0	2	4
TBL105	Occupational Health and Safety	Compulsory Course	Turkish	2	0	0	2	2
TBL113	Programming Laboratory	Compulsory Course	Turkish	0	0	2	2	2

Total ECTS credits for Compulsory Course								30
Total ECTS for 1st Semester								30
2nd Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
AIT102	Atatürk's Principles and History of Turkish Revolutions II	Compulsory Course	Turkish	2	0	0	2	2
YDB102	English II (de)	Compulsory Course	Turkish	4	0	0	4	4
TDB102	Turkish Language II (de)	Compulsory Course	Turkish	2	0	0	2	2
TKN104	Physics II	Compulsory Course	Turkish	3	2	0	5	5
TKN102	Mathematics II	Compulsory Course	Turkish	4	0	1	5	5
TBL104	Algorithm and Programming–ii	Compulsory Course	Turkish	3	0	0	3	4
TBL106	Linear Algebra	Compulsory Course	Turkish	3	0	0	3	3
TBL114	Programming Laboratory–ii	Compulsory Course	Turkish	0	0	2	2	2
TBL102	Management Information Systems	Compulsory Course	Turkish	3	0	0	3	3
Total ECTS credits for Compulsory Course								30
Total ECTS for 2nd Semester								30

3rd Semester

Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
TKN211	Differential Equations	Compulsory Course	Turkish	3	0	1	4	4
TBL201	Electrical Electronic Circuits	Compulsory Course	Turkish	3	0	2	5	5
TBL209	Statistics and Probability	Compulsory Course	Turkish	3	0	0	3	4
TBL213	Business Economics	Compulsory Course	Turkish	2	0	0	2	3
TBL203	Object Oriented Programming	Compulsory Course	Turkish	3	0	0	3	5
Total ECTS credits for Compulsory Course								21
TBL227	Introduction To Java Programming	Elective Course Group I	Turkish	3	0	0	3	5
TBL217	Usage and Management of Linux Operating System	Elective Course Group I	Turkish	3	0	0	3	5
TBL223	Mobile Application Development	Elective Course Group I	Turkish	3	0	0	3	5
TBL221	Introduction To Nanotechnology	Elective Course Group I	Turkish	3	0	0	3	5
TBL225	Mobile Programming With React-native Framework	Elective Course Group I	Turkish	3	0	0	3	5
TBL219	Signal and Systems	Elective Course Group I	Turkish	3	0	0	3	5

At least 5 ECTS courses will be selected		Total ECTS credits for Elective Course Group I						5
University Elective I								4
Total ECTS for 3rd Semester								30
4th Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
TBL204	Logic Circuits	Compulsory Course	Turkish	3	0	1	4	4
TBL202	Numerical Anlysis	Compulsory Course	Turkish	2	0	1	3	3
TBL226	Technical English	Compulsory Course	Turkish	3	0	0	3	3
TBL224	Data Structures and Algorithm	Compulsory Course	Turkish	3	0	2	5	5
TBL206	Database Menagement Systems	Compulsory Course	Turkish	3	0	2	5	6
Total ECTS credits for Compulsory Course							21	
TBL222	Judicial Informatics	Elective Course Group II	Turkish	3	0	0	3	5
TBL214	Visual Programming	Elective Course Group II	Turkish	3	0	0	3	5
TBL216	User Interface Design	Elective Course Group II	Turkish	3	0	0	3	5
TBL218	Parallel and Distributed Systems Programming	Elective Course Group II	Turkish	3	0	0	3	5

TBL220	Python Programming	Elective Course Group II	Turkish	3	0	0	3	5
At least 5 ECTS courses will be selected		Total ECTS credits for Elective Course Group II						5
University Elective II								4
Total ECTS for 4th Semester								30
5th Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
TKN351	Internship I	Compulsory Course	Turkish	0	0	0	0	3
TBL339	Discrete Mathematics	Compulsory Course	Turkish	3	0	0	3	4
TBL301	Computer Architecture and Organization	Compulsory Course	Turkish	3	0	0	3	4
TBL305	Information Systems Analysis and Design	Compulsory Course	Turkish	3	0	0	3	4
TBL303	Web Design	Compulsory Course	Turkish	3	0	1	4	4
TBL331	Software Development Laboratory-i	Compulsory Course	Turkish	0	0	2	2	3
TBL309	Management and Organization	Compulsory Course	Turkish	2	0	0	2	3
Total ECTS credits for Compulsory Course								25
TBL343	Algorithm Analysis and Complexity	Elective Course Group III	Turkish	3	0	0	3	5

TBL307	E-commerce and E-business Applications	Elective Course Group III	Turkish	3	0	0	3	5
TBL317	Control Systems	Elective Course Group III	Turkish	3	0	0	3	5
TBL337	Introduction To Text Mining	Elective Course Group III	Turkish	3	0	0	3	5
TBL341	Microprocessors	Elective Course Group III	Turkish	3	0	0	3	5
TBL321	Marketing Management	Elective Course Group III	Turkish	3	0	0	3	5
TBL315	Digital Signal Processing	Elective Course Group III	Turkish	3	0	0	3	5
TBL311	Data Communications	Elective Course Group III	Turkish	3	0	0	3	5
TBL335	Time Series Analysis and Forecasting	Elective Course Group III	Turkish	3	0	0	3	5
At least 5 ECTS courses will be selected		Total ECTS credits for Elective Course Group III						5
Total ECTS for 5th Semester								30
6th Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
TBL306	Computer Networks	Compulsory Course	Turkish	3	0	2	5	5
TBL308	Information Systems and Security	Compulsory Course	Turkish	3	0	0	3	4

TBL302	Operating Systems	Compulsory Course	Turkish	3	0	0	3	4
TBL304	Web Programming	Compulsory Course	Turkish	3	0	1	4	4
TBL332	Software Development Laboratory-ii	Compulsory Course	Turkish	0	0	2	2	3
Total ECTS credits for Compulsory Course								20
TBL324	Advanced Java Applications	Elective Course Group IV	Turkish	3	0	0	3	5
TBL314	Compiler Design	Elective Course Group IV	Turkish	3	0	0	3	5
TBL320	E-government Applications	Elective Course Group IV	Turkish	3	0	0	3	5
TBL318	Communications Systems	Elective Course Group IV	Turkish	3	0	0	3	5
TBL322	Introduction To Machine Learning	Elective Course Group IV	Turkish	3	0	0	3	5
TBL328	Spatial Databases	Elective Course Group IV	Turkish	3	0	0	3	5
TBL326	Internet of Things	Elective Course Group IV	Turkish	3	0	0	3	5
At least 10 ECTS courses will be selected		Total ECTS credits for Elective Course Group IV						10
Total ECTS for 6th Semester								30
7th Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS

TKN405	Final Project – A	Compulsory Course	Turkish	0	0	2	2	3
Total ECTS credits for Compulsory Course								3
TKN401	Workplace Training (de)	Elective Course Group VI	Turkish	5	0	0	5	5
TKN403	Workplace Application	Elective Course Group VI	Turkish	0	0	15	15	19
TBL432	Antennas and Propagation	Elective Course Group VI	Turkish	3	0	0	3	5
TBL434	Computer Graphics	Elective Course Group VI	Turkish	3	0	0	3	5
TBL460	Special Topics In Information Systems Engineering	Elective Course Group VI	Turkish	3	0	0	3	5
TBL408	Fuzzy Logic	Elective Course Group VI	Turkish	3	0	0	3	5
TBL456	Introduction To Big Data Analysis	Elective Course Group VI	Turkish	3	0	0	3	5
TBL430	Multimedia Systems	Elective Course Group VI	Turkish	3	0	0	3	5
TBL438	Sentiment Analysis	Elective Course Group VI	Turkish	3	0	0	3	5
TBL428	Embedded System Design	Elective Course Group VI	Turkish	3	0	0	3	5
TBL426	Image Processing	Elective Course Group VI	Turkish	3	0	0	3	5
TBL436	Wireless Network Technologies and Applications	Elective Course Group VI	Turkish	3	0	0	3	5

TBL416	Wireless Sensor Networks	Elective Course Group VI	Turkish	3	0	0	3	5
TBL422	Game Programming	Elective Course Group VI	Turkish	3	0	0	3	5
TBL418	Robotics	Elective Course Group VI	Turkish	3	0	0	3	5
TBL420	Virtual Reality	Elective Course Group VI	Turkish	3	0	0	3	5
TBL458	Sap-abap Programming	Elective Course Group VI	Turkish	3	0	0	3	5
TBL414	Data Mining	Elective Course Group VI	Turkish	3	0	0	3	5
TBL462	Web Application Security	Elective Course Group VI	Turkish	3	0	0	3	5
TBL412	Artificial Neural Network	Elective Course Group VI	Turkish	3	0	0	3	5
TBL424	Artificial Intelligence	Elective Course Group VI	Turkish	3	0	0	3	5
At least 20 ECTS courses will be selected		Total ECTS credits for Elective Course Group VI						20
TKN410	Entrepreneurship	Elective Course Group VII	Turkish	2	0	0	2	3
TKN412	Business Law	Elective Course Group VII	Turkish	2	0	0	2	3
TKN414	Quality Management	Elective Course Group VII	Turkish	2	0	0	2	3
TBL442	Information and Records Management	Elective Course Group VII	Turkish	2	0	0	2	3

TBL444	History of Science	Elective Course Group VII	Turkish	2	0	0	2	3
TBL446	Scientific Research and Reporting	Elective Course Group VII	Turkish	2	0	0	2	3
TBL402	It Law and Ethics	Elective Course Group VII	Turkish	2	0	0	2	3
TBL452	English Technical Writing and Reporting	Elective Course Group VII	Turkish	2	0	0	2	3
TBL440	Career Planning and Human Resources Management	Elective Course Group VII	Turkish	2	0	0	2	3
TBL450	Project Management	Elective Course Group VII	Turkish	2	0	0	2	3
TBL454	Supply Chain and Logistics	Elective Course Group VII	Turkish	2	0	0	2	3
TBL448	Technical Communication	Elective Course Group VII	Turkish	2	0	0	2	3
At least 3 ECTS courses will be selected		Total ECTS credits for Elective Course Group VII						3
University Elective III								4
Total ECTS for 7th Semester								30
8th Semester								
Code	Name	Type of Course Unit	Language	T	L	P	H	ECTS
TKN406	Final Project – B	Compulsory Course	Turkish	0	0	2	2	3
TKN451	Internship II	Compulsory Course	Turkish	0	0	0	0	3

Total ECTS credits for Compulsory Course								6
TKN402	Workplace Training (de)	Elective Course Group V	Turkish	5	0	0	5	5
TKN404	Workplace Application Spring	Elective Course Group V	Turkish	0	0	15	15	19
At least 24 ECTS courses will be selected		Total ECTS credits for Elective Course Group V						24
Total ECTS for 8th Semester								30
Common Course of University								
Elective Course of University								
Common Course of Faculty of Technology								
Course of Information Systems Engineering								