

SABANCI UNIVERSITY - FACULTY OF ENGINEERING AND NATURAL SCIENCES
COMPUTER SCIENCE ENGINEERING PROGRAM RECOMMENDED PROGRAM FAST TRACK 2)

Year -1 Freshman Semester-1							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
MATH101	Calculus I	University C.		3	0	6	6
NS101	Science of Nature I	University C.		4	0	6	6
CIP101N	Civic Involvement Projects I	University C.		0	0	0	1
HST191	Principles of Atatürk and the History of the Turkish Revolution I	University C.		2	0	0	3
SPS101	Humanity and Society I	University C.		3	0	0	6
TLL101	Turkish Language and Literature I	University C.		2	0	0	3
IF100	Computational Approaches to Problem Solving	University C.		3	5	0	5
TERM TOTAL				17	5	12	30

The students have to take *Undergraduate Project Course (PROJ 201) on Freshman or sophomore year.

Year -1 Freshman Semester-2							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 201	Introduction to Computing	Required	IF 100	3	6	0	6
MATH 203	Introduction to Probability	Required	MATH 102	3	0	6	6
TERM TOTAL				6	6	6	12

Year - 2 Sophomore Semester-3							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
PROJ 201	*Undergraduate Project Course	University C.		1	0	0	1
HUM 301/203/204	Major Works	University C.		3	0	0	5
CS 204	Advanced Programming	Required	CS 201	3	6	0	6
DSA 210	Intro. to Data Science	Core	MATH 203 and IF 100	3	4	2	6
MATH 212	Linear Algebra and Differential Equations	Required	MATH 102	4	0	7	7
MATH 204	Discrete Mathematics	Required		3	0	6	6
TERM TOTAL				17	10	15	31

The students have to take *Undergraduate Project Course (PROJ 201) on Freshman or sophomore year.

Year - 3 Junior Semester-5							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 301	Algorithms	Required	CS 300 and Math 204	3	5	1	6
CS308	Software Engineering	Required	CS 204	4	7	0	7
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
TERM TOTAL				16	12+Electives	1+Electives	31

Year -3 Junior Semester-6							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 395	Summer Internship	Required C.		0	5	0	5
TERM TOTAL				0	5	0	5

Year - 4 Senior Semester-7							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
ENS 491	Graduation Project - Design	Required C.	CS 300 and 80 credits	1	2	0	2
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
TERM TOTAL				16	2+Electives	Electives	32

Year-1 Freshman Semester-2							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
MATH102	Calculus II	University C.	MATH 101	3	0	6	6
NS102	Science of Nature II	University C.	NS 101	4	0	6	6
AL102	Academic Literacies	University C.		3	0	0	5
HST192	Principles of Atatürk and the History of the Turkish Revolution II	University C.	HST 191	2	0	0	3
SPS102	Humanity and Society II	University C.	SPS 101	3	0	0	6
TLL102	Turkish Language and Literature II	University C.	TLL 101	2	0	0	3
TERM TOTAL				17	0	12	29

The students have to take *Undergraduate Project Course (PROJ 201) on Freshman or sophomore year.

Year - 2 Sophomore Semester-4							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 300	Data Structures	Required	CS 204	3	5	1	6
CS 303	Logic and Digital System Design	Required		4	6	1	7
CS 306	Database Systems	Required	CS 204 or DSA 201	3	6	0	6
CORE/AREA/elec.	Elective			3			6
PHYS 113 **	Basic Concepts of Physics for Scientists and Engineers	Required	NS 101 and Math 101	3	0	6	6
TERM TOTAL				16	17+Electives	8+Electives	31

The students have to take *Undergraduate Project Course (PROJ 201) on Freshman or sophomore year.

** PHYS 113 can be taken in any of the semesters during sophomore year.

Year - 3 Junior Semester-6							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
SPS 303		University C.		3	0	0	5
TERM TOTAL				15	Electives	Electives	29

Year - 4 Senior Semester-8							
Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Engineering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
ENS 492	Graduation Project - Implement	Required	ENS 491	3	5	0	5
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
CORE/AREA/elec.	Elective			3			6
TERM TOTAL				12	5+Electives	Electives	23

SU CREDITS TOTAL: 132
ECTS TOTAL : 253 (minimum required 240)