SABANCI UNIVERSITY - FACULTY OF FACULTY OF ENGINEERING AND NATURAL SCIENCES
COMPUTER SCIENCE ENGINEERING PROGRAM RECOMMENDED PROGRAM (STANDARD TRACK)

Year -1 Freshman Semester-1

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering 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
HIST191	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	Enginering 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
HIST192	Principles of Atatürk and the History of the Turkish Revolution II	University C.	HIST 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-3

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
*PROJ 201	*Undergraduate Project Course	University C.		1	0	0	1
HUM 201/202/207	Major Works	University C.		3	0	0	5
CS 201	Introduction to Computing	Required	IF 100	3	6	0	6
MATH 212	Linear Algebra and Differential Equations	Required	MATH 102	4	0	7	7
MATH 203	Introduction to Probability	Required	MATH 102	3	0	6	6
PHYS 113 **	Basic Concepts of Physics for Scientists and Engineers	Required	NS 101 and Math 101	3	0	6	6
			TERM TOTAL	17	6+Elective	19	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 - 2 Sophomore Semester-4

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 204	Advanced Programming	Required	CS 201	3	6	0	6
MATH 204	Discrete Mathematics	Required		3	0	6	6
DSA 210	Intro. to Data Science	Core	MATH 203 and IF 100	3	4	2	6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
			TERM TOTAL	15	10+Electives	8+Electives	30

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	Enginering 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/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
			TERM TOTAL	16	17+Electives	2+Electives	31

Year - 3 Junior Semester-6

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering 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/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
SPS 303		University C.		3	0	0	5
			TERM TOTAL	19	12 + Electives	1 + Electives	36

Year -3 Junior SUMMER

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
CS 395	Summer Internship	Required C.	Junior Standing at the beginning of Spring semester	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	Enginering 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/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
			TERM TOTAL	16	2+Electives	Electives	32

Year - 4 Senior Semester-8

Course Code	Course Name	Course Type	Prerequisite Courses	SU Credits	Enginering Credits (ECTS)	Basic Science Credits (ECTS)	ECTS (Total)
ENS 492	Graduation Project - Implement	Required	ENS 491	3	5	0	5
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
CORE/AREA/FREE		Elective		3			6
			TERM TOTAL	15	5+Electives	Electives	29

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