SABANCI UNIVERSITY - FACULTY OF FACULTY OF ENGINEERING AND NATURAL SCIENCES
COMPUTER SCIENCE ENGINEERING PROGRAM RECOMMENDED PROGRAM FAST TRACK 3)

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
CS 201	Introduction to Computing	Required	IF 100	3	6	0	6
			TERM TOTAL	**20**	**6**	**12**	**35**

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

Year -1 Freshman SUMMER							
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
			TERM TOTAL	**3**	**6**	**0**	**6**

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 300	Data Structures	Required	CS 204	3	5	1	6
MATH 203	Introduction to Probability	Required	MATH 102	3	0	6	6
MATH 204	Discrete Mathematics	Required		3	0	6	6
PHYS 113 **	Basic Concepts of Physics for Scientists and Engineers	Required	NS 101 and Math 101	3	0	7	7
			TERM TOTAL	**16**	**5**	**20**	**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 301	Algorithms	Required	CS 300, Math 204	3	5	1	6
CS 210	Intro. to Data Science	Core	MATH 203, IF 100	3	4	2	6
MATH 212	Linear Algebra and Differential Equations	Required	MATH 102	4	0	7	7
CS 306	Database Systems	Required	CS 204 or DSA 201	3	6	0	6
CORE/AREA/FREE		Elective		3			6
			TERM TOTAL	**16**	**15+Electives**	**10+Electives**	**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**	**Enginering Credits (ECTS)**	**Basic Science Credits (ECTS)**	**ECTS (Total)**
CS 303	Logic and Digital System Design	Required		4	6	1	7
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
			TERM TOTAL	**17**	**13+Electives**	**1+Electives**	**32**

Year - 3 Junior Semester-6							
Course Code	**Course Name**	**Course Type**	**Prerequisite Courses**	**SU Credits**	**Enginering Credits (ECTS)**	**Basic Science Credits (ECTS)**	**ECTS (Total)**
CORE/AREA/FREE		Elective		3			6
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	**15**	**Electives**	**Electives**	**29**

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	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
			TERM TOTAL	**12**	**5+Electives**	**Electives**	**23**

SU CREDITS TOTAL: 132
ECTS TOTAL : 254 (minimum required 240)