

Study Plan^c Guide for a B.Sc. Degree in Computer Science

A. Study Plan Guide for the General Track

First Year							
First Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
ENGL1001	Upper-Intermediate English	3	3	3	-	F2F	ENGL0099
GERL101B1	German I B1-Track	3	6	9	-	F2F	-
CS116	Computing fundamentals	3		3	-	F2F	-
CS1160	Computing fundamentals lab	1		-	3	F2F	CS116 ^{co}
ARB100	Arabic	3	3	3	-	OL	ARB0099
MATH101	Calculus I	3	5	3	-	BLD	MATH0099
	University Elective	3					
Total		19		21	3		

First Year							
Second Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL102B1	German II	3	6	9	-	F2F	GERL101B1
GERL102B2	B1-Track						
NE101	National Education	3	2	3	-	OL	ARB0099, ENGL0099
MATH102	Calculus II	3	5	3	-	F2F	MATH101
CS117	Object-Oriented Programming	3		3	-	F2F	CS116, CS1160 ^{co}
CS1170	Object-Oriented Programming Lab	1		-	3	BLD	CS116, CS1160 ^{co} , CS117 ^{co}
CS201	Discrete Structures	3		3	-	F2F	MATH0099, ARB0099, ENGL0099
CE212	Digital Systems	3		3	-	F2F	CS116, MATH0099, ARB0099, ENGL0099
CE2120	Digital Systems Lab	1		-	3	BLD	CS116, CE212 ^{co} , MATH0099, ARB0099, ENGL0099
Total		20		24	6		

^cThe following study plan guide does not take into account possible remedial courses.

Second Year							
First Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL201B1	German III	B1-Track	3	4	6	-	F2F
GERL201B2		B2-Track					
CE201	Computer Architecture and Organization	3		3	-	F2F	CE212, ARB0099, ENGL0099, MATH0099
CS222	Theory of Algorithms	3		3	-	F2F	CS116, CS201, ARB0099, ENGL0099, MATH0099
CS223	Data Structures	3		2	2	F2F	CS116, ARB0099, ENGL0099, MATH0099
CS263	Database Management Systems	3		2	2	BLD	CS117, ARB0099, ENGL0099, MATH0099
EE317	Linear Algebra	3		3	-	BLD	MATH101, MATH102 ^{co}
	University Elective	3					
Total		21		19	4		

Second Year							
Second Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL202B1	German IV	B1-Track	3	6	9	-	F2F
GERL202B2		B2-Track					
MILS100	Military Science	3	2	3	-	OL	-
IE0121	Probability and Statistics	3		3	-	F2F	MATH101
CS264	Visual Programming	3		2	2	F2F	CS117, CS263, ARB0099, ENGL0099, MATH0099
CS342	Software Engineering	3		3	-	BLD	CS117, CS263
CS355	Web Technologies	3		2	2	BLD	CS117, CS263
CS451	Artificial Intelligence	3		3	-	F2F	CS223, CS222
Total		21		25	4		

Third Year							
First Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL301B1	German V	B1-Track	3	6	9	-	F2F GERL202B1 or GERL202B2
GERL301B2		B2-Track					
CS323	Computational Theory	3		3	-	F2F	CS222, CS223
CS332	Computer Graphics	3		2	2	F2F	CS223, EE317
CE352	Computer Networks	3		3	-	BLD	CE201
CE357	Operating Systems	3		3	-	F2F	CE201
CS419	Compiler Construction	3		3	-	F2F	CS222, CS223
CE3570	Operating Systems Lab	1		-	3	BLD	CE201, CE357 ^{co}
Total		19		23	5		

Third Year							
Second Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL302B1	German V	B1-Track	3	6	9	-	F2F GERL301B1 or GERL301B2
GERL302B2		B2-Track					
ENGL1002	Advanced English	3	3	3	-	F2F	ENGL1001
CS330	Image Understanding	3		2	2	F2F	CS223, EE317
CS356	Information Security	3		3	-	F2F	CS263
CS391	Field Training 160 hours	0		160 hours		F2F	Dept. Approval
CS416	Systems Programming	3		2	2	F2F	CS223
CS477	Mobile Computing	3		2	2	BLD	CS117, CS263
CS492	Senior Project	3		-	9	BLD	Dept. Approval
Total		21		18	15		

Fourth Year							
First Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
	elective course	3					
	elective course	3					
	elective course	3					
	elective course	3					
Total		12		0	0	0	

Fourth Year							
Second Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
CS491	International Internship 20 weeks	12		20 weeks		F2F	CS391
Total		12		0	0	36	