

Degree Plan of Option II: B. S. in Computer Science (Internship)

COURSE	TITLE	LT	LB	CR	COURSE	TITLE	LT	LB	CR
Preparatory Year									
ENGL 01-xx	Prep. English I (First Quarter)	15	5	4	ENGL 03-xx	Prep. English III (Third Quarter)	15	5	4
ENGL 02-xx	Prep. English II (Second Quarter)			4	ENGL 04-xx	Prep. English IV (Fourth Quarter)			4
MATH 001	Prep. Math I	3	1	4	MATH 002	Prep. Math II	3	1	4
PYP 001	Prep. Physical Science	2	0	2	PYP 002	Prep. Computer Science	0	2	1
PYP 003	University Study Skills	0	2	1	PYP 004	Prep. Eng. Technology	0	2	1
PE 001	Prep. Health and Physical Educ. I	0	2	1	PE 002	Prep. Health and Physical Educ. II	0	2	1
		20	10	16			18	12	15
First Year (Freshman)									
ENGL 101	Intro. to Academic Discourse	3	0	3	ENGL 102	Intro. to Report Writing	3	0	3
IAS 121	Language Foundation	2	0	2	IAS 111	Belief & its Consequences	2	0	2
ICS 104	Intro. to Programming in Python and C	2	3	3	ICS 108	Object Oriented Programing	3	3	4
MATH 101	Calculus I	4	0	4	MATH 102	Calculus II	4	0	4
PE 101	Health and Physical Education I	0	2	1	PHYS 102	General Physics II	3	3	4
PHYS 101	General Physics I	3	3	4					
		14	8	17			15	6	17
Second Year (Sophomore)									
COE 202	Digital Logic Design	3	0	3	CHEM 101	Principles of Chemical Science I	3	3	4
COE 203	Digital Logic Laboratory	0	3	1	COE 301	Computer Organization	3	3	4
ISE 291	Intro. to Data Science	3	0	3	COE 292	Intro. to Artificial Intelligence	3	0	3
ICS 202	Data Structures & Algorithms	3	3	4	ICS 253	Discrete Structures	3	0	3
MATH 208	Intro. to Diff. Eq. & Linear Algebra	3	0	3	MATH 201	Calculus III	3	0	3
SWE 206	Intro. To Software Engineering	2	3	3					
		14	9	17			15	6	17
Third Year (Junior)									
ENGL 214	Academic & Professional Comm.	3	0	3	BUS 200	Business & Entrepreneurship	3	0	3
IAS 212	Ethics and Governance	2	0	2	CGS 392	Career Essentials	1	0	1
ICS 321	Database Systems	3	0	3	GS XXX	GS Elective	3	0	3
ICS 343	Fundamentals of Cmptner. Networks	3	3	4	IAS XXX	Islamic/Arabic Elective	2	0	2
STAT 319	Prob. and Stat. for Eng. & Scientists	3	2	3	ICS 344	Information Security	3	0	3
SWE 363	Web Eng. & Development	3	0	3	ICS 353	Design and Analysis of Algorithms	3	0	3
					ICS 381	Principles of Artificial Intelligence	3	0	3
		17	5	18			18	0	18
Summer Session									
Fourth Year (Senior)									
ICS 398	Internship	0	0	6	ICS 410	Programming Languages	3	0	3
ICS 413	Senior Project I	0	0	0	ICS 414	Senior Project II	0	9	3
					ICS 433	Operating Systems	3	1	3
					ICS XXX	Major Elective I	3	0	3
					ICS XXX	Major Elective II	3	0	3
					ICS XXX	Major Elective III	3	0	3
		0	0	6			15	10	18
Total credit hours required in Degree Program: 128									