

I. COE Department Study Plan Summary

First Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
ENG0011	English I	8	-	-
STAT100	Statistics	2	-	-
PHYS110	Physics I	2	-	-
CSC105	Computer Skills	4	-	-
PSYCH101	Thinking Skills & Learning Styles	2	-	-
Total Credits		18		

Second Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
ENG0012	English II	5	ENG0011	-
ESP102	English for Eng. & Computer Science	2	ENG0011	-
MATH105	Differential Calculus	3	-	-
PHYS115	Physics II	3	PHYS110	-
CSC111	Computer Programming	3	CSC105	-
Total Credits		16		

Third Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
CS181	Computer Programming II	3	CSC111	-
PHYS116	Physics III	4	PHYS115	-
MATH115	Integral Calculus	3	MATH105	-
ARAB101	Linguistic Skills	2	-	-
IT131	Database	3	CSC111	-
Total Credits		15		

Fourth Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE121	Logic Design	3	CSC111	COE122
COE122	Logic Design Lab	1	-	COE121
CS182	Computer Programming III	3	CS181	-
MATH116	Linear Algebra and Multi-Variable Calculus	3	MATH115	-
STAT126	Statistics & Probability	3	STAT100	-
ARAB103	Arabic Writing	2	-	-
IC101	Introduction to Islamic Culture	2	-	-
Total Credits		17		

Fifth Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE211	Electric Circuits	3	MATH115 PHYS116	COE212
COE212	Electric Circuits Lab	1	-	COE211
COE223	Computer Organization	3	COE121	-
CS211	Concepts of Algorithms	3	CS181	-
MATH212	Discrete Mathematics	3	MATH116	-
MATH218	Differential Equations	3	MATH116	-
IC102	Islam and Community Building	2	IC101	-
Total Credits		18		

Sixth Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE213	Electronics	3	COE211	COE214
COE214	Electronics Lab	1	COE212	COE213
COE224	Assembly Language	3	COE223	-
COE231	Human Computer Interaction (HCI)	2	CS181	-
CS214	Data Structures	3	MATH212	-
CS222	Operating Systems	3	CS182	-
	CoC Elective I	3	-	-
Total Credits		18		

Seventh Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE325	Microprocessors Systems	3	COE213 COE224	COE326
COE326	Microprocessors Systems Lab	1	-	COE325
COE361	Signals and Systems Analysis	3	MATH218	COE362
COE362	Signals and Systems Lab	1	-	COE361
CS383	Software Engineering	3	CS222	-
MATH329	Operation Research	3	MATH116	-
IC103	Economic System in Islam	2	IC101	-
Total Credits		16		

Eighth Semester

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE332	Microcontroller Applications	2	COE325	-
COE333	Computer Systems Engineering	3	CS383	-
COE351	Computer Networks	3	CS222	COE352
COE352	Computer Networks Lab	1	-	COE351
IC104	Political System in Islam	2	IC101	-
	Free Hours I	3	-	-
	COC Elective II	3	-	-
Total Credits		17		

Ninth Semester (Option A)

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE497	Summer Training	1	120 C.H.	-
COE434	Embedded Systems	3	COE325	COE435
COE435	Embedded Systems Lab	1	-	COE434
COE498	Graduation Project (I)	2	120 C.H.	-
IT362	Communication Skills & Ethics issues	2	STAT126	-
	COE Optional I	3	-	-
	Free Hours II	3	-	-
Total Credits		15		

Tenth Semester (Option A)

Course Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE415	VLSI	3	COE213	-
COE499	Graduation Project (II)	3	COE498	-
	COE Optional II	3	-	-
	COE Optional III	3	-	-
Total Credits		12		

Ninth Semester (Option B)

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
COE494	Cooperative Training I	1	120 C.H.	Summer
COE495	Cooperative Training II	11	COE494	-
Total Credits		12		

Tenth Semester (Option B)

Code	Course Name	Credit	Pre-Requisite	Co-Requisite
IT362	Communication Skills & Ethics issues	2	STAT126	-
COE415	VLSI	3	COE213	COE213
COE496	CO-OP Graduation Project	3	COE495	COE495
	Free Hours II	3	-	-
COE434	Embedded Systems	3	COE325	COE325
COE435	Embedded Systems Lab	1	-	-
Total Credits		15		