

Program Study Plan (Improved Plan)

Level	Course Code	Course Title	Required/ Elective	Pre- Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level 1	CIS 101	Computer Skills	Required	---	3	University
	ENGL 001	English Language (1)	Required	---	6	University
	MTH 101	Introductory Mathematics	Required	---	3	College
	EDU 101	University Life Skills	Required	---	2	University
Level 2	CIS 102	Problem Solving and Programming	Required	CIS 101	3	College
	ENGL 002	English Language (2)	Required	ENGL 001	6	University
	MTH 102	Differential Calculus	Required	MTH 101	3	College
	CHM 103	Principles of Chemistry	Required	---	3	College
Level 3	ISL 101	Fundamental of Islamic Culture	Required	---	2	University
	ARB 100	Arabic Language Skills	Required	---	2	University
	CIS 203	Computer programming (1)	Required	CIS 102	4	College
	CIS 211	Discrete Maths	Required	MTH 102	3	College
	PHS 101	General Physics (1)	Required	---	4	Department
	MTH 203	Integral Calculus	Required	MTH 102	3	College
Level 4	CNE 101	Digital & Logic Design	Required	CIS 211	3	Department
	CIS 204	Computer programming (2)	Required	CIS 203	4	College
	PHS 202	General Physics (2)	Required	PHS 101	4	Department
	MTH 204	Advanced Calculus	Required	MTH 203	3	Department
	MTH 285	Principles of Linear Algebra	Required	MTH 203	3	Department
Level 5	CNE 202	Advanced Digital & Logic Design	Required	CNE 101	3	Department
	CNE 203	Digital & Logic Design Lab	Required	Co-Req CNE 202	1	Department
	MTH 305	Differential Equations	Required	MTH 204	3	Department
	CIS 205	Data structures	Required	CIS 203	4	College
	MTH 281	Statistics and Probabilities	Required	MTH 203	3	College
	ELE 262	Electrical & Electronic Circuits	Required	PHS 202	4	Department
Level 6	ISL 107	Professional Ethics	Required	---	2	University

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	CIS 321	Software Engineering	Required	CIS 204	3	Department
	CIS 322	Concepts of Database Systems	Required	CIS 205	4	College
	MTH 382	Numerical Methods	Required	MTH 305	3	Department
	CNE 204	Computer Architecture & Organization	Required	CNE 202	3	Department
	CNE 211	Signals and Systems	Required	MTH 204	3	Department
Level 7	CIS 342	Operating Systems	Required	CIS 205	3	College
	CNE 305	Microprocessor Systems	Required	CNE 204	4	Department
	CNE 312	Data & Computer Communications	Required	CNE 211	4	Department
	CNE 313	Computer Networks (1)	Required	Co-Req CNE 312	3	Department
	CNE 321	Automatic Control Systems	Required	CNE 211	3	Department
Level 8	ARB 102	Writing Skills	Required	---	2	University
	ISL 10x	ISL 109 or ISL 100 or ISL 108	Elective	---	2	University
	CIS 323	Software Project Management	Required	CIS 322	3	College
	CNE 307	Embedded Systems	Required	CNE 305	3	Department
	CNE 308	Embedded Systems Lab	Required	Co-Req CNE 307	1	Department
	CNE 314	Computer Networks (2)	Required	CNE 313	3	Department
	CNE 315	Computer Networks Lab	Required	Co-Req CNE 314	2	Department
	CNE 322	Automatic Control Systems Lab	Required	CNE 321	1	Department
Summer 4 th Year - Training	CNE 391	Field Training	Required	Finish 110 Credit Hours	1	Department
Level 9	CNE 416	Principles of wireless Communication Networks	Required	CNE 313	3	Department
	CNE 417	Networks & Information Security	Required	CNE 315	3	Department
	CNE 406	Introduction to VLSI Design	Required	ELE 262	3	Department
	XXX xxx	Elective (1)	Elective	---	3	Department
	CNE 492	Graduation Project (1)	Required	Finish 110 CH	2	Department
Level 10	ISL 10x	ISL 109 or ISL 100 or ISL 108	Elective	---	2	University
	XXX 10x	EDU102 or BUS101	Elective	---	2	University
	XXX xxx	Elective (2)	Elective	---	3	Department
	XXX xxx	Elective (3)	Elective	---	3	Department
	CNE 493	Graduation Project (2)	Required	CNE 492	3	Department

* Include additional levels if needed

** Add a table for each track (if any)

Computer Engineering and Networks Electives

Code			Name	CH	Prerequisite
1	CNE	494	Selected topics in Computer Engineering	3	Finish 110 Credit Hours, any departmental prerequisites
2	CNE	495	Selected topics in Networks	3	Finish 110 Credit Hours, any departmental prerequisites
3	CNE	481	Heterogeneous Networks	3	CNE 313
4	CNE	482	Optical Networks	3	CNE 313
5	CNE	483	Wireless Sensor Networks	3	CNE 313
6	CNE	484	Digital Image Processing	3	CIS 205
7	CNE	485	Parallel Architecture Computing	3	CNE 305
8	CNE	472	Network Security Practice	3	Co-Req. CNE 417
9	CNE	473	Testing of Digital Circuits	3	CNE 203
10	CNE	474	Pattern Recognition	3	Finish 90 Credit Hours
11	CNE	475	Digital and Fuzzy Control	3	CNE 322
12	CNE	476	Modern Sensors	3	Finish 90 Credit Hours
13	CNE	477	Digital Design using VHDL	3	CNE 203
14	CNE	478	Intelligent Systems and Robotics	3	Finish 90 Credit Hours
15	CIS	313	Artificial Intelligence	3	CIS 205
16	CIS	414	Design and Analysis of Algorithms	3	CIS 205
17	CIS	426	Advanced Software Engineering	3	CIS 321
18	CIS	434	Cloud computing	3	Finish 90 Credit Hours
19	CIS	442	Applied Cryptography	3	Finish 90 Credit Hours
20	CIS	462	Natural Language Processing	3	Finish 90 Credit Hours
21	CIS	463	Bioinformatics	3	Finish 90 Credit Hours
22	CIS	465	Expert Systems	3	Finish 90 Credit Hours

* Include additional levels if needed

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