Study Plan

First Year (Preparatory Year for the College of Engineering)											
First semester						Second semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite	Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab					Lecture	Lab	
ME 200	Engineering Drawing A	1	-	3	-	NE 100	Introduction to Engineering	1	1	-	-
ME 100	Engineering Workshops	1	-	3	---	ARB 101	Arabic Language	3	3	-	----
HSS 119 B	Introduction to Entrepreneurship and Innovation for Engineering	2	3	-	-	MATH 102	Calculus 2	3	3	-	MATH 101
MATH 101	Calculus 1	3	3	-	---	CHEM 102	General Chemistry 2	3	3	-	CHEM 101
PHYS 101	General physics 1	3	3	-	---	CHEM 107	General Chemistry lab.	1	-	3	CHEM 102 (or Co.)
CHEM 101	General Chemistry 1	3	3	-	---	PHYS 102	General Physics 2	3	3	-	PHYS 101
NE 114	Programming For Engineers	3	2	2	-	PHYS 107	General Physics lab.	1	-	3	PHYS 102 (or Co.)
Total		**16**	**14**	**8**		**Total**		**15**	**13**	**6**	

Second Year											
First semester						Second semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite	Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab					Lecture	Lab	
EE 212	Electric Circuit Analysis	3	3	-	PHYS 102, Co MATH 203	CHE 242	Engineering Thermodynamics	3	3		MATH203
HSS 129	General Skills	2	2	-	-	EE 204	Introduction to Linear Systems	3	3		MATH 201
IE 213	Mechanics of Materials 1	3	3	-	PHYS101	EE 213	Electric Circuits Lab	1	-	3	EE 212
MATH 201	Intermediate Analysis	3	3		MATH 102	NE 204	Applied Engineering Statistics	3	3		MATH 203
MATH 203	Ordinary Differential Equations	3	3		MATH 102	NE 206	Introduction to Nuclear Engineering	3	3		Passing NE 203
NE 203	Fundamentals of Nuclear Science	3	3		Passing PHYS 102	Eng 112	English Language 2	3	3	-	
NE 201	Ethics & Development of Nuclear Technology	1	1		----						
Total		**18**	**18**	**-**		**Total**		**16**	**15**	**3**	

Third Year											
First semester						Second semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite	Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab					Lecture	Lab	
EE 305	Numerical Methods for Engineers	3	3		MATH 203, NE 114	ME 451	Heat Transfer	3	3		MATH 203 , ME 343
ME 343	Fluid Mechanics	3	3		PHYS101, MATH 203	IE 367	Engineering Materials Lab	1		3	IE 363
IE 351	Economics and Engineering Management	2	2		MATH 201	HSS 110	Social Responsibility	3	2	1	
IE 363	Engineering Materials	3	3		Co IE 213	NE 312	Radiation Detection and Measurement Lab I	1	-	3	NE 311
NE 311	Ionizing Radiation Detection & Measurement	3	3		NE 204, Passing NE 203	NE 322	Radiation Protection and Dosimetry	3	3		NE 311
NE 351	Signals and Control Systems	3	3		EE 212, Co EE 204	NE 340	Nuclear Reactors Theory	3	3		PASSING NE 206
						NE 372	Computational Techniques in Nuclear Engineering	3	3		NE 114, Co NE 340
Total		**17**	**17**	**-**		**Total**		**17**	**14**	**7**	

Fourth Year											
First semester						Second semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite	Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab					Lecture	Lab	
ME 445	Thermo Fluid Lab.	1		3	Co ME 451	NE 448	Nuclear Reactor Lab	3	2	3	NE 441, NE 413
NE 413	Radiation Detection and Measurement Lab II	1		3	NE 312	NE 452	Nuclear Instrumentation & Control	3	3		NE 340, NE 351
NE 431	Nuclear Reactors Thermal Hydraulics	3	3		CHE 242, ME 451	NE 460	Fuel Cycle and Waste Management	3	3		NE 441
NE 441	Nuclear Reactors Analysis	3	3		Passing NE 340	NE 472	Modeling and Simulation of Nuclear Reactors	3	3		NE 441
NE 451	Nuclear Power Plant Systems and Operations I	3	3		NE 340, Co NE 431	NE 482	Nuclear Engineering Seminar	1	1	--	Completion of 100 Cr.
NE 465	Nuclear Reactor Materials	3	3		NE 340 & IE 363	UE	University Elective	3	3		
NE 471	Radiation Interactions and Shielding Design	3	3		NE 311	IE 351					
Total		**17**	**15**	**6**		**Total**		**16**	**15**	**3**	

Fourth Year					
Summer semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab	
NE 490*	Engineering Training*	3	--	--	Completion of 117 Cr
Total		**3**			

*** 8 weeks of practical training in a by-Faculty accredited institution pertaining to nuclear engineering**

Fifth Year											
First semester						Second semester					
Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite	Course No.	Course Name	Credit Hours	Weekly hours		Prerequisite
			Lecture	Lab					Lecture	Lab	
	Department Elective	3	3				Department Elective	3	3		
	Department Elective	3	3			UE	University Elective	3	3		
UE	University Elective	3	3			NE 592	Graduation Project II	3	--	--	NE 490, NE 591
NE 521	Nuclear Reactor Safety	3	3		NE 451	MS 100	Military Sciences	3	3	-	--
NE 591	Graduation Project I	1	--	--	Completion of 117 Cr						
Total		**13**	**12**	**-**		**Total**		**12**	**9**		