# **Study Plan**

## First Year

## **First Semester:**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisit
Code		Hrs	Hrs	Hrs	Hrs	е
MTH121	Engineering Mathematics	3	3	-	2	
PHY121	Engineering Physics I	4	3	2	2	
COM111	IT Fundamentals	3	2	2	-	
CHE101	Chemistry for Engineers	3	2	2	-	
MEC101	Introduction to Engineering	1	1	-	1	
ISL114	Islamic Culture	3	3	_	1	
		17	14	6	6	

# **Second Semester**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisi
Code		Hrs	Hrs	Hrs	Hrs	te
MTH122	Engineering Mathematics II	3	3	-	2	MTH121
PHY122	Engineering Physics II	4	3	2	2	PHY121
MEC102	Computer Programming	3	3	-	2	COM111
MEC103	Engineering Drawing and Mechanical Workshop	3	1	(2+2)*	_	
ARB111	Comm. Skills in Arabic Lang.	3	3	_	<del>-</del>	
		16	13	6	6	

<sup>\*</sup> For the course MEC103, 1 hour of lecture, 2 hours of studio and 2 hours of workshop.

## **Summer Semester**

Course Code	Course Title	Credit Hrs	Lec.	Lab.	Tut.	Prerequisi
			Hrs	Hrs	Hrs	te
STA112	Statistics	3	2	2	-	
	University Elective - I	3	3	_	_	
		6	5	2	-	

# **Second Year**

## **First Semester**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisi
Code		Hrs.	Hrs.	Hrs.	Hrs.	te

MTH221	Engineering Mathematics III	3	3	_	2	MTH122
MEC201	Fundamentals of Electrical Engineering	4	3	2	1	PHY122
MEC202	Engineering Mechanics - Statics	3	3	_	1	PHY121
MEC203	Engineering Materials	3	2	2	1	CHE101
MEC204	Thermodynamics	3	3	_	1	PHY121
		16	14	4	6	

## **Second Semester**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisi
Code		Hrs.	Hrs.	Hrs.	Hrs.	te
MTH222	Engineering Mathematics IV	3	3	-	2	MTH221
MEC205	Engineering Mechanics - Dynamics	3	3	_	1	MEC202
MEC206	Mechanics of Solids	4	3	2	1	MEC202
MEC207	Fluid Mechanics	4	3	2	1	PHY121
MEC208	Report Writing and Presentation	3	3	_	1	MEC101
		17	15	4	6	

# **Third Year**

## First Semester:

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisite
Code		Hrs.	Hrs.	Hrs.	Hrs.	
MTH321	Engineering Mathematics V	3	3	_	2	MTH122
MEC301	Heat Transfer	4	3	2	1	MEC204
MEC302	Computational Methods in Engineering	3	3	-	2	MTH221, MEC102
MEC303	Design of Machine Elements	3	3	-	1	MEC103, MEC206
ENV111	Environmental Science	3	3	_	_	
		16	15	2	5	

INTERNAL TRAINING (2 Weeks in Fall Break)

# **Second Semester:**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisi
Code		Hrs.	Hrs.	Hrs.	Hrs.	te
MEC304	Control Systems	4	3	2	2	MTH321
MEC305	Engineering Management	3	3	-	1	MEC208
MEC306	Machine Design	4	3	2	1	MEC303
MEC307	Manufacturing Technology	4	3	2	1	MEC206

INN311	Innovation and Entrepreneurship (English)	3	3	_	_	60 Cr. Hrs.
	1 1, 0	18	15	6	5	

MEC499: ENGINEERING TRAINING I (6 Weeks in Summer Break)

# Fourth (Final) Year

#### **First Semester**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisite
Code		Hrs.	Hrs.	Hrs.	Hrs.	
MEC401	Directed Studies in Mechanical Engineering	3	3	-	-	MEC305
MEC402	Turbo Machines	3	3	-	-	MEC207, MEC301
MEC491	Graduation Design Project I	3	1	4	-	MEC306, MEC307
	Program Elective I	3	3	_	_	
	Program Elective II	3	3	_	_	
		15	13	4	_	

# **Second Semester**

Course	Course Title	Credit	Lec.	Lab.	Tut.	Prerequisite
Code		Hrs.	Hrs.	Hrs.	Hrs.	
MEC403	Refrigeration and Air Conditioning	4	3	2	_	MEC301
MEC492	Graduation Design Project II	3	1	4	_	MEC491
	Program Elective III	3	3	_	-	
	Program Free Elective	3	3	_	_	Advisor's approval
	University Elective - II	3	3	_	_	
		16	13	6	_	

MEC499: ENGINEERING TRAINING II (6 Weeks in Summer)