



Sur University College

Engineering Dep.

Mechanical Study Plan

Engineering study plan

Mechanical Program

Bachelors in Mechanical Engineering - Study Plan

College Requirements (CR), Foundation Program Non-Credit Courses (0 Credit Hours):

No.	Course Code	Course Name	Prerequisite	Credit Hours
1	000111	English Preparation I	None	0
2	000112	Principles of Mathematics	None	0
3	000113	Comp Information & Management I	None	0
4	000121	English Preparation II	000111	0
5	000122	Pure Mathematics	000112	0
6	000123	Comp Information & Management II	000113	0

General Core Curriculum Courses Requirements (15 credit hours):

No.	Course Code	Course Name	Prerequisite	Credit Hours
1	919111	Technical Writing	000121	3
2	190112	Scientific Thinking	None	3
3	999122	Oman Society and Culture	None	3
4	803224	Entrepreneurship	None	3
5	903131	Arab Society	None	3
	or 903233	or World History Art Survey or		3
	or 911331	Modern and Contemporary Art		3

Department Requirements (DR) (21 Credit Hours):

No.	Course Code	Course Name	Prerequisite	Credit Hours
1	101131	Calculus I	000122	3
2	201123	Fundamentals of Computer Science	000123	3
3	103113	Classical Mechanics, Sound and Heat	101131, 103114 Conc.	3
4	103114	General Physics Laboratory I	103113 Conc.	1
5	301116	Descriptive Geometry and Engineering Drawing	None	2
6	105115	General Chemistry I	None	3
7	300123	Engineering Mechanics I (Statics)	103113	3
8	300214	Engineering Economy	101131	3

Program Requirements (PR) (110 Credit Hours):

No.	Course Code	Course Name	Prerequisite	Credit Hours
1	101111	Calculus II	101131	3
2	101121	Calculus III	101111	3
3	101211	Differential Equations	101121	3
4	103222	Probability and Statistics	000122	3
5	103125	Electricity and Magnetism	103113,103114, 101111, 103126 Conc.	3
6	103126	General Physics Laboratory II	103114,103125 Conc.	1
7	103212	Introduction to Circuit Analysis and Devices	103125, 103213 Conc.	3
8	103213	Intermediate Physics Lab	103212 Conc.	2
9	300117	Introduction to Engineering	None	1
10	300131	Engineering Mechanics II (Dynamics)	101121, 300123	3
11	300132	Strength and Testing of Materials	300123	4
12	300224	Fundamentals of Fluid Mechanics	300131	3
13	300225	Engineering Analysis and Computation I	201123,101211	3
14	300232	General Electrical Engineering	103125, 101211	3
15	307124	Mechanical Engineering Drawing	301116	1
16	307215	Mechanics of Materials	300132, 307124	3
17	307216	Engineering Materials	105115, 300132	3
18	307315	Mechanical Design I	300131, 307124	3
19	307223	Fundamentals of Manufacturing Processes	307216	3
20	307232	Fundamentals of Thermodynamics	300224, 105115	3
21	307233	Mechanical Systems	300131, 300225	3
22	307311	Quality and Process Control	300225, 103222	3
23	307312	System Dynamics	103212, 307233	3
24	307313	Engineering and Project Management	103222	3
25	307314	Applied Fluid Mechanics	307232	3
26	307321	Applied Thermodynamics	307232	3
27	307322	Engineering Operations Research	300225	3
28	307323	Work Analysis and Design	307223	3
29	307416	Mechanical Design II	307315, 307233	3
30	307325	Advanced Manufacturing Processes	307223	3
31	307412	Facilities Planning	307223	3
32	307415	Selection of Materials and Processes for Engineering Design	307223, 307315	3
33	307324	Heat Transfer	300225, 307314	4
34	307421	Quality and Reliability Engineering	307311	3
35	307422	Manufacturing System Automation	307223	3

No.	Course Code	Course Name	Prerequisite	Credit Hours
36	307424	Production and Inventory Control	300225, 300214	3
37	307414	Industrial Training	All 300 and 18 hrs of 307 as minimum	1
38	307419	Senior Project I	All 300 and 18 hrs of 307 as minimum	3
39	307429	Senior Project II	307419	3

Mechanical General Elective Courses (6 Credit Hours):

Two courses (6 Credit Hours) must be selected from the group of Mechanical General Elective courses:

No.	Course Code	Course Name	Prerequisite	Credit Hours
1	307326	Energy Technologies	307232- Concurrent	3
2	307411	Mechanical Measurements		3
3	307XXX	General Elective Course (3)	XXXXXX	3
4	307XXX	General Elective Course (4)	XXXXXX	3

