

List of Courses

First Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME101	Engineering drawing I	(3+3) 6		
2	ES101	Mathematics I	(4+8) 12		
3	ES111	Physics I	(4+8) 12		
4	ES121	Chemistry I	(3+6) 9		
5	ES181	Physics Lab. I	(3+0) 3		
6	ES183	Chemistry Lab. I	(3+0) 3		ES111
7	AL100	Arabic I	(3+3) 6		ES121
8	EL101	English I	(3+6) 9		
Sum			63		

Second Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME102	Engineering drawing II	(3+3) 6	ME101	
2	ES102	Mathematics II	(4+8) 12	ES101	
3	ES112	Physics II	(4+8) 12	ES111	
4	ES122	Chemistry II	(3+6) 9	ES121	
5	ES182	Physics Lab. II	(3+0) 3	ES181	ES112
6	ES184	Chemistry Lab. II	(3+0) 3	ES183	ES122
7	EL102	English II	(3+3) 0	EL101	
Sum			60		

Third Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME203	Materials science	(3+4) 7	ES122	
2	ME205	Materials science lab.	(3+2) 5	ME203	ME204
3	ME211	Thermodynamics I	(3+6) 9	ES111	
4	IE207	Mechanical workshop		ME102	
5	ES201	Differential equations	(4+8) 12	ES102	
6	ES215	Mechanics I	(4+8) 12	ES102, ES112	
7	ES261	Int. to computer & program.	(3+6) 9		
Sum			60		

Fourth Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME204	Engineering materials	(3+6) 9	ME203	
2	ME212	Thermodynamics II	(3+6) 9	ME211	
3	ME222	Strength of materials I	(3+6) 9	ES201, ES215	
4	IE208	Manufacturing processes	(3+6) 9	ME203, IE207	
5	ES206	Linear algebra	(4+8) 12	ES102	
6	ES216	Mechanics II	(4+8) 12	ES215	
Sum			60		

Fifth Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME301	Elements of machinery I	(4+5) 9	ME102, ME204, ME222	
2	ME303	Mechanisms	(3+6) 9	ME102, ES216	
3	ME305	Fluid mechanics I	(3+6) 9	ME211, ES216	
4	ME311	Heat transfer	(3+6) 9	ME211, ES201	
5	ME323	Strength of materials II	(4+6) 10	ME222	
6	ME325	Strength of materials lab.	(3+2) 5	ME222	
7	EE301	Electrical engineering fund I	(3+6) 9	ES102, ES	
Sum			60		

Sixth Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME304	Refri., AC & Heat Transfer Lab.	(3+2) 5		ME212, ME311
2	ME306	Fluid Mechanics II	(3+6) 9		ME211, ES216
3	ME314	Elements of Machinery II	(3+6) 9		ME301, ME323*
4	ME316	Dynamics of Machinery	(3+6) 9		ME303
5	ME324	Machine Design Project	(2+1) 3		ME301, ME314*
6	IE308	Manuf. Processes & M/tools	(4+8) 12		IE208
7	EE302	Elec. Eng. Fundamentals II	(3+6) 9		EE301
Sum			56		

Seventh Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME401	Internal combustion engines	(4+8) 12	ME311	
2	ME405	Hydraulic machines	(3+6) 9	ME306	
3	ME407	Refri. & airconditioning I	(3+6) 9	ME311	
4	ME409	Heat lab.	(3+2) 5	ME212, ME305	ME401
5	ME419	Fluid mechanics lab.	(3+2) 5	ME306	ME405
6	ME421	Project I	(4+4) 8	**	
7	IE307	Engineering economy	(3+6) 9	ES102	
Sum			57		

Eighth Semester

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME402	Thermal power plants	(3+6) 9	ME306, ME311	
2	ME406	Automatic control ***	(3+6) 9	ES201	
3	ME408	Corrosion control ***	(3+6) 9	ME204	
4	+	Elective			
5	ME422	Project II	(6+12) 18	ME421	
Sum			54		

Electives

S.No.	Course No.	Course Title	Unit	Coreq.	Prereq.
1	ME430	Solar energy Engineering	(3+6) 9		ME407
2	ME432	Desalination plants	(3+6) 9	ME212, ME305	
3	ME440	Refri. & airconditioning II	(3+6) 9	ME407	
4	ME443	Heat exchangers design	(3+6) 9	ME306, ME311	
5	ME444	Engineering materials II	(3+6) 9	ME314, ME324, ME421	

Notes:

- * This course is first part of the project ME 422 to be continued in the 8th semester.
- ** Can be taken only by the students who are likely to graduate in the same academic year prerequisites and co-requisites are dependent on particular project. Registration according to relevant department decision.
- *** Can be taken only by the students who are finished 340 credits out of 464 credits.
- + One of the electives should be selected.
 - Total units of the 8 semesters are: 464
 - Total units of the last 6 semesters (without ES 261) are: 338