

DEPARTMENT OF MECHANICAL ENGINEERING
SYLLABUS (FROM 22-BATCH & ON WARDS)

First Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	SS 111 / SS 104	Islamic Studies / Ethics	2	0	50	0
2	(PS 106)	Pakistan Studies	2	0	50	0
3	(MTH 108)	Applied Calculus	3	0	100	0
4	(ME 103)	Engineering Drawing & Computer Graphics	0	2	0	100
5	(ME 152)	Applied Physics	2	0	50	0
6	(CH 108)	Applied Chemistry	2	0	50	0
7	(ME 143)	Workshop Practice	0	2	0	100
Total: -			11+04=15		300	200

Second Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ENG 101)	Functional English	3	0	100	0
2	(MTH 103)	Linear Algebra Differential Equation & Analytical Geometry (LADEAG)	3	0	100	0
3	(ME 113)	Engineering Statics	2	1	50	50
4	(ME 123)	Engineering Materials	3	0	100	0
5	(EL 102)	Electrical Technology	2	1	50	50
6	(ES 281)	Basic Electronics	2	1	50	50
Total: -			15+03=18		450	150

Third Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(MTH 213)	Complex Variables & Transforms	3	0	100	0
2	(ME 203)	Mechanics of Materials-I	2	0	50	0
7	(ME 286)	Engineering Dynamics	2	0	50	0
4	(ME 222)	Thermodynamics-I	3	0	100	0
5	(ME 252)	Fluid Mechanics-I	3	1	100	50
6	(CS 210)	Introduction to Computing and Programming	2	1	50	50
Total: -			15+02=17		450	100

Fourth Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ENG 201)	Communication Skills	2	0	50	0
2	(ME 233)	Mechanics of Materials-II	3	1	100	50
3	(ME 242)	Thermodynamics-II	3	1	100	50
4	(ME 226)	Fluid Mechanics-II	3	1	100	50
5	(ME 212)	Mechanics of Machines-I	2	0	50	0
Total:-			13+03=16		400	150

Fifth Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME 302)	Heat & Mass Transfer	3	1	100	50
2	(MTH 336)	Numerical Analysis & Computer Applications (NACA)	3	1	100	50
3	(ME 332)	Machine Design -I	3	0	100	0
4	(ME 366)	Mechanics of Machine-II	2	1	50	50
5	(ENG-301)	Technical and Scientific Writing	2	0	50	0
6	(ME 313)	Manufacturing Processes-I	2	0	50	0
Total: -			15+03=18		450	150

Sixth Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME 343)	Instrumentation & Control	3	1	100	50
2	(MTH 317)	Statistics & Probability	3	0	100	0
3	(ME 352)	Machine Design-II	3	0	100	0
4	(ME 372)	Refrigeration & Air Conditioning	3	1	100	50
5	(ME 383)	Manufacturing Processes-II	2	1	50	50
6	(ME 356)	Computer Aided Machine Design (CAMD)	0	1	0	50
Total: -			14+04=18		450	200

Seventh Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME 403)	Engineering Management and Entrepreneurship	3	0	100	0
2	(ME 463)	Mechanical Vibrations	2	1	50	50
3	(ME 444)	Power Plants	2	1	50	50
4	(ME 498)	Final Year Design Project/Thesis –I	--	3	0	100
5	(ME--)	Elective-1	2	0	50	0
6	(ME--)	Elective-2	3	0	100	0
Total: -			12+05=17		350	200

Eighth Semester

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME-453)	Renewable Energy Technologies (RET)	2	1	50	50
2	(EE 425)	Safety, Health & Environment	2	0	50	0
3	(ME 413)	Automobile Engineering	3	1	100	50
4	(ME 499)	Final Year Design Project/Thesis-II	--	3	0	100
5	(ME--)	Elective-1	2	0	50	0
6	(ME--)	Elective-2	3	0	100	0
Total: -			12+05=17		350	200

ELECTIVE-1

Engineering Stream

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME-408)	Finite Element Analysis	2	0	50	0
2	(ME-468)	Supply Chain Management	2	0	50	0
3	(ME-426)	Professional Ethics & Practices	2	0	50	0
4	(ME-472)	Maintenance Engineering	2	0	50	0

ELECTIVE-2

Management Stream

S.#.	Course Codes	Name of Subject	Credit Hours		Marks	
			Th.	Pr.	Th.	Pr.
1	(ME-483)	Engineering Economics and Project Management	3	0	100	0
2	(ME-488)	Total Quality Management	3	0	100	0
3	(ME-428)	Computational Fluid Dynamics	2	1	50	0
4	(ME-431)	Applied Aerodynamics	2	1	50	50