

KADI SARVA VISHWAVIDYALAYA, GANDHINAGAR

Master of Engineering - Mechanical (Thermal) ENGINEERING Semester 1 Syllabus

Subject Code	Subject Name	Teaching Scheme				Total Credit	Evaluation Scheme					Total Marks
		L (Hrs)	T (Hrs)	P (Hrs)	TOTAL Hrs		Theory Hrs	Marks	IE Marks	CIA Marks	Practical / Viva Marks	
MECC-101	Research Methodology	2	0	0	2	2	3	70	30	20	0	120
METH-102	Advanced Thermodynamics & Heat Transfer	4	0	2	6	5	3	70	30	20	30	150
METH-103	Fluid Mechanics & Gas Dynamics	4	0	2	6	5	3	70	30	20	30	150
METH-104	Instrumentation for Engineers	3	0	2	5	4	3	70	30	20	30	150
METH-105	Literature Review & Report Writing Practice	0	0	2	2	1	0	0	0	60	100	160
METH-106 A	Minor Elective I Boiler Technology	3	0	0	3	3	3	70	30	20	0	120
METH-106 B	Minor Elective I Principles of Management	3	0	0	3	3	3	70	30	20	0	120
METH-106 C	Minor Elective I Entrepreneurship Development	3	0	0	3	3	3	70	30	20	0	120
METH-106 D	Minor Elective I Applied Mathematics	3	0	0	3	3	3	70	30	20	0	120
METH-107 A	Major Elective I Advanced Internal Combustion Engine	4	0	2	6	5	3	70	30	20	30	150
METH-107 B	Major Elective I Advanced Refrigeration	4	0	2	6	5	3	70	30	20	30	150
Total		20	0	10	30	25	18	420	180	180	220	1000

Master of Engineering - Mechanical (Thermal) ENGINEERING Semester 2 Syllabus

Subject Code	Subject Name	Teaching Scheme				Total Credit	Evaluation Scheme					Total Marks
		L (Hrs)	T (Hrs)	P (Hrs)	TOTAL Hrs		Theory Hrs	Marks	IE Marks	CIA Marks	Practical / Viva Marks	
METH-201	Thermal Power Plant Engineering	4	0	2	6	5	3	70	30	20	30	150
METH-202	Computational Fluid Dynamics	3	0	2	5	4	3	70	30	20	30	150
METH-203	Design of Heat Exchange Equipments	3	0	2	5	4	3	70	30	20	30	150
METH-204	Fans, Blowers & Compressors	3	0	0	3	3	3	70	30	20	0	120
METH-205 A	Minor Elective II Economics & Management of Thermal Systems	3	0	0	3	3	3	70	30	20	0	120
METH-205 B	Minor Elective II Cogeneration & Waste Heat Recovery Systems	3	0	0	3	3	3	70	30	20	0	120
METH-205 C	Minor Elective II Non conventional Energy conversion systems	3	0	0	3	3	3	70	30	20	0	120
METH-205 D	Minor Elective II Energy Conservation & Management	3	0	0	3	3	3	70	30	20	0	120
METH-206 A	Major Elective II Combustion Engineering	4	0	2	6	5	3	70	30	20	30	150
METH-206 B	Major Elective II Advanced Air conditioning	4	0	2	6	5	3	70	30	20	30	150
METH-207	Seminar	0	0	2	2	1	0	0	0	60	100	160
Total		20	0	10	30	25	18	420	180	180	220	1000

Master of Engineering - Mechanical (Thermal) ENGINEERING Semester 3 Syllabus												
Subject Code	Subject Name	Teaching Scheme				Total Credit	Evaluation Scheme					Total Marks
		L (Hrs)	T (Hrs)	P (Hrs)	TOTAL Hrs		Theory Hrs	Marks	IE Marks	CIA Marks	Practical / Viva Marks	
METH-301	Modeling Simulation & Computer Application	4	2	0	6	6	3	70	30	20	30	150
METH-302 A	Major Elective III Thermal Energy Systems	4	1	0	5	5	3	70	30	20	30	150
METH-302 B	Major Elective III Cryogenic Engineering	4	1	0	5	5	3	70	30	20	30	150
METH-303 A	Minor Elective III Food processing, Preservation and Transport	3	0	0	3	3	3	70	30	20	0	120
METH-303 B	Minor Elective III Environmental Engineering and Pollution Control	3	0	0	3	3	3	70	30	20	0	120
METH-303 C	Minor Elective III Exergy Analysis of Thermal System	3	0	0	3	3	3	70	30	20	0	120
METH-304	DISSERTATION PHASE-I	0	0	16	16	16	0	0	0	50	150	200
Total		11	3	16	30	30	9	210	90	110	210	620

Master of Engineering - Mechanical (Thermal) ENGINEERING Semester 4 Syllabus												
Subject Code	Subject Name	Teaching Scheme				Total Credit	Evaluation Scheme					Total Marks
		L (Hrs)	T (Hrs)	P (Hrs)	TOTAL Hrs		Theory Hrs	Marks	IE Marks	CIA Marks	Practical / Viva Marks	
METH-401	MID SEMESTER THESIS PROGRESS REVIEW	0	0	15	15	15	0	0	0	50	150	200
METH-402	DISSERTATION PHASE-II	0	0	15	15	15	0	0	0	50	150	200
Total		0	0	30	30	30	0	0	0	100	300	400