

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA

TECHNOCRATS INSTITUTE OF TECHNOLOGY (An Autonomous Institute)

Scheme of Examination

I-Semester

Master of Technology

HeatPower and Thermal Engineering (HPTE)

S.No.	Subject Code	Subject Name	Periods per week			Credits	Maximum Marks (Theory Slot)			Maximum Marks (Practical Slot)		Total Marks
			L	T	P		End Sem. Exam.	Tests (Two)	Assignments /Quiz	End Sem. Practical/ Viva	Practical Record/ Assignment/Quiz /Presentation	
1.	MMTP-101	Advance Mathematics	3	0	-	3	70	20	10	-	-	100
2.	MMTP-102	Advanced Thermodynamics	3	0	-	3	70	20	10	-	-	100
3.	MMTP-103 Programme Elective-I	1. I.C. Engines & Alternate fuels 2. Programming and Numerical Methods 3. Thermodynamics of energy storage Materials	3	0	-	3	70	20	10	-	-	100
4.	MMTP-104 Programme Elective-II	1. Fluid Flow and Gas Dynamics 2. Nuclear Engineering 3. Thermal Engineering for sustainable Technologies	3	0	-	3	70	20	10	-	-	100
5.	MMTP-105	Thermal Engineering Lab-I	0	0	4	2	-	-	-	90	60	150
6.	MMTP-106	Thermal Engineering Lab-II	-	-	4	2	-	-	-	90	60	150
7.	MMTP-107	Research Methodology and IPR	2	0	0	2	70	20	10			100
8.	MMTP-108	Audit Course-1 English for Research paper writing	2	0	0	0						
Total			16	0	8	18	350	100	50	180	120	800

Schedule
11/09/25

HPTE
11/9/25

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA

TECHNOCRATS INSTITUTE OF TECHNOLOGY (An Autonomous Institute)

Scheme of Examination

II-Semester

Master of Technology

HeatPower and Thermal Engineering (HPTE)

S.No.	Subject Code	SubjectName	Periods perweek			Credits	Maximum Marks(Theory Slot)			Maximum Marks(Practical Slot)		Total Marks
			L	T	P		End Sem. Exam.	Tests (Two)	Assign ments /Quiz	EndSem .Practica l /Viva	Practical Record/ assignm ent/Quiz /present ation	
1.	MMTP-201	Advanced Heat and Mass Transfer	3	0	0	3	70	20	10	-	-	100
2	MMTP 202	Refrigeration & Air-Conditioning System Design	3	0	0	3	70	20	10	-	-	100
3	MMTP-203 (Programme Elective-III)	1. Theory and Design of Gas Turbines 2. DesignofHeatExchangers 3. Finite Element Methods	3	0	0	3	70	20	10	-	-	100
4.	MMTP 204 (Programme Elective-IV)	1. Theory and Design of Turbo Machine 2. Steam Engineering 3. Computational Fluid Dynamics	3	0	0	3	70	20	10	-	-	100
5.	MMTP 205	Thermal Engineering Lab-III	0	0	4	2				90	60	150
6.	MMTP 206	Thermal Engineering Lab-IV	0	0	4	2	-	-	-	90	60	150
7.	MMTP 207 Audit	Audit- 2 Stress Management	2	0	0	0	-	-	-		-	-
8.	MMTP 208	Mini-Project	0	0	4	2					50	50
Total			14	0	12	18	280	80	40	180	170	750

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RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA

TECHNOCRATS INSTITUTE OF TECHNOLOGY (An Autonomous Institute)

Scheme of Examination

III-Semester

Master of Technology

HeatPower and Thermal Engineering (HPTE)

S.No.	Subject Code	SubjectName	Periods perweek			Credits	MaximumMark s (Theory			MaximumMarks (Practical Slot)		Total Marks
			L	T	P		End Sem. Exam.	Tests (Two)	Assign ments /Quiz	End Sem. Practic al/Viva	Practical Record/ Assignm ent/Quiz /Present ation	
1.	MMTP -301 (Programme- Elective-V)	1. DesignofGreen Technologies andSystem 2. Heat and power in additive Manufacturing 3. Hybrid and Electric Vehicles	3	0	0	3	70	20	10	-	-	100
2.	MMTP 302 (Open Elective)	1. Business Analytics 2. Artificial Intelligence in Thermal Engineering 3. Optimization Techniques 4. Smart Materials 5. Waste to Energy	3	0	0	3	70	20	10	-	-	100
3.	MMTP 303 Dissertation	Dissertation Phase-I	-	-	20	10	-	-	-	120	80	200
Total			6	0	20	16	140	40	20	120	80	400

Schedule

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RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA												
TECHNOCRATS INSTITUTE OF TECHNOLOGY (An Autonomous Institute)												
Scheme of Examination												
IV-Semester Master of Technology												
HeatPower and Thermal Engineering (HPTE)												
S.No.	Subject Code	Subject Name	Periods per week			Credits	Maximum Marks (Theory Slot)			Maximum Marks (Practical Slot)		Total Marks
			L	T	P		End Sem. Exam.	Tests (Two)	Assignments / Quiz	End Sem. Practical/ Viva	Practical Record/ Assignment/ Quiz / Presentation	
1.	Dissertation	Dissertation Phase-II	-	-	32	16	-	-	-	300	200	500
Total			-	-	32	16	-	-	-	300	200	500

Total Credit for the programme 18+18+16+16=68

*Notes:

1. List of programme electives is indicative. The University may decide this depending on facilities and expertise available with them. But the
2. Lab sessions may be conducted for core courses of individual semesters as shown in the structure but marks of evaluation will be reported as Contents of the courses listed in the structure are given on following pages

Auditcourse 1 & 2

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through Life Enlightenment Skills.

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