

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20  
DEFINITION OF ONE CREDIT:

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - I (Batch - 2019-21)

1. **Lecture (L):** 1 hour / week / semester,
2. **Practical (P):** 2 hour / week / semester,
3. **Tutorial (T):** 2 hour / week / semester.

## TEACHING SCHEME

Course Code	Course Name	Teaching Hours			SSH	Credits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
RM103	Research Methodology and IPR	3	0	0	1	3	N	Y	N	
TH111	Applied Thermodynamics	4	0	0	2	4	N	Y	N	
TH113	Advanced Heat and Mass Transfer	3	2	0	2	4	N	Y	N	
TH116	Advanced Gas Dynamics	3	0	0	2	3	N	Y	N	
TH117	Advanced Fluid Dynamics	3	2	0	2	4	N	Y	N	
TH118	Thermal Simulation Using LabVIEW	1	0	2	1	2	N	Y	Y	
TH9XX	Elective - I	3	0	2	3	4	N	Y	Y	Any One Offered Elect. - I
PG101	Software Lab - I	0	0	2	3	1	N	Y	Y	
	<b>TOTAL</b>	<b>20</b>	<b>4</b>	<b>6</b>	<b>16</b>	<b>25</b>				
		<b>Total Teaching Hours 30</b>								

N- No      CIE – Continuous internal evaluation

Y – Yes      PSEE – Practical semester end examination including ITD, Dissertation, Industrial project, Industrial training etc.

SSH - Self-study hours

**HOD**

**Director**



## DETAILED TEACHING SCHEME

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20  
DEFINITION OF ONE CREDIT:

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - I (Batch - 2019-21)

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### Elective – I

Course Code	Course Name	Teaching Hours			SSH	Credits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
TH923	Theory and Design of Cryogenic Systems	3	0	2	3	4	N	Y	Y	Any One Offered Elect. - I
TH924	Analysis and Design of I.C Engines	3	0	2	3	4	N	Y	Y	
TH925	Solar Energy Conservation Systems	3	0	2	3	4	N	Y	Y	

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**HOD**

**Director**

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20  
DEFINITION OF ONE CREDIT:

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - II (Batch - 2019-21)

1. **Lecture (L):** 1 hour / week / semester,
2. **Practical (P):** 2 hour / week / semester,
3. **Tutorial (T):** 2 hour / week / semester.

## TEACHING SCHEME

Course Code	Course Name	Teaching Hours			SSH	Credits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
TH216	Advanced Refrigeration and Air-Conditioning Systems	3	0	2	2	4	N	Y	Y	
TH217	Acoustics and Noise Control	3	0	0	3	3	N	Y	N	
TH218	Computational Fluid Dynamics	3	0	2	3	4	N	Y	Y	
TH219	Advanced Thermal Power Plant Engineering	2	0	2	2	3	N	Y	Y	
TH220	Design of Heat Exchange Equipments	3	0	2	2	4	N	Y	Y	
TH9YY	Elective – II	4	0	2	3	5	N	Y	Y	Any One Offered Dept. Elect. - I
PG201	Software Lab - II	0	0	2	3	1	N	Y	Y	
	<b>TOTAL</b>	<b>18</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>24</b>				
		<b>Total Teaching Hours 30</b>								

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SSH - Self-study hours

**HOD**

**Director**

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20  
DEFINITION OF ONE CREDIT:

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - II (Batch - 2019-21)

4. **Lecture (L):** 1 hour / week / semester,
5. **Practical (P):** 2 hour / week / semester,
6. **Tutorial (T):** 2 hour / week / semester.

### Elective – II

Course Code	Course Name	Teaching Hours			SSH	Credits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
TH914	ANALYSIS AND DESIGN OF THERMAL TURBO MACHINES	4	0	2	3	5	N	Y	Y	Any One Offered Elect. - II
TH916	EXERGY ANALYSIS OF THERMAL SYSTEMS	4	0	2	3	5	N	Y	Y	
TH917	ENERGY AUDIT AND MANAGEMENT	4	0	2	3	5	N	Y	Y	

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SSH - Self-study hours

**HOD**

**Director**

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20  
DEFINATION OF ONE CREDIT:

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - III (Batch - 2018-20)

1. **Lecture (L):** 1 hour / week / semester,
2. **Practical (P):** 2 hour / week / semester,
3. **Tutorial (T):** 2 hour / week / semester.

TEACHING SCHEME										
Course Code	Course Name	Teaching Hours			SSH	Cre dits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
TH301	Seminar	-	-	-	3	5	N	Y	Y	
THDP1	Dissertation Phase-I	-	-	-	20	20	N	Y	Y	
<b>TOTAL</b>		-	-	-	<b>23</b>	<b>25</b>				
		<b>Total Teaching Hours --</b>								

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SSH - Self-study hours

**HOD**

**Director**



## DETAILED TEACHING SCHEME

SCHOOL OF ENGINEERING  
ACADEMIC YEAR - 2019-20

PROGRAM: M. TECH - THERMAL SCIENCE (MECHANICAL ENGINEERING)  
SEMESTER - IV (Batch - 2018-20)

DEFINATION OF ONE CREDIT:

1. **Lecture (L):** 1 hour / week / semester,
2. **Practical (P):** 2 hour / week / semester,
3. **Tutorial (T):** 2 hour / week / semester.

### TEACHING SCHEME

Course Code	Course Name	Teaching Hours			SSH	Credits	Audit course	CIE	PSEE	Remarks if any
		Theory	Tutorial	Practical						
THDP2	Dissertation Phase-II	-	-	-	20	25	N	Y	Y	
<b>TOTAL</b>		-	-	-	<b>20</b>	<b>25</b>				
		<b>Total Teaching Hours --</b>								

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SSH - Self-study hours

**HOD**

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