

# Syllabus Scheme for Master of Technology Production Engineering 2019 onwards

**Total Credits: 19+18+16+16=69**

## 1st Semester

Sr. No.	Code	Course Type	Course Name	Teaching Scheme			Credits	Type of Subject	Marks		
				L	T	P			Int.	Ext.	Total
1	MPE-101	Core Course	Advanced Metal Forming	3	0	0	3	Theory	50	100	150
2	MPE-102	Core Course	Advanced Metal Casting	3	0	0	3	Theory	50	100	150
3	MPE-XXX	Program Elective	<b>Program Elective I (Any one)</b>	3	0	0	3	Theory	50	100	150
	MPE-105		Entrepreneurship								
	MPE-106		Jig Fixture and Press Design								
	MPE-107		Advanced Plant Layout Design								
4	MPE-XXX	Program Elective	<b>Program Elective II (Any one)</b>	3	0	0	3	Theory	50	100	150
	MPE-108		Product Design and Development								
	MPE-109		Additive Manufacturing Process and Applications								
	MPE-110		Flexible Manufacturing Systems								
5	LMPE-101	Core Course	Advanced Manufacturing processes Laboratory	0	0	4	2	Practical	50	50	100
6	LMPE-102	Core Course	Advanced Machining and Casting processes Laboratory	0	0	4	2	Practical	50	50	100
7	MRM-101	Core Course	Research Methodology and IPR	3	0	0	3	Theory	50	100	150
8	MAC-105	Audit Course 1	Constitution of India	2	0	0	0	Theory	50	-	50
Total				17	0	12	19		400	600	1000

## 2nd Semester

Sr. No.	Code	Course Type	Course Name	Teaching Scheme			Credits	Type of Subject	Marks		
				L	T	P			Int.	Ext.	Total
1	MPE-103	Core Course	Advanced Welding Processes	3	0		3	Theory	50	100	150
2	MPE-104	Core Course	Advanced Metal Cutting	3	0		3	Theory	50	100	150
3	MPE-XXX	Program Elective	<b>Program Elective III (Any one)</b>	3	0		3	Theory	50	100	150
	MPE-111		Production and Inventory Control								
	MPE-112		Quality Assurance								
	MPE-113		Advanced Industrial Tribology								
4	MPE-XXX	Program Elective	<b>Program Elective IV (Any one)</b>	3	0		3	Theory	50	100	150
	MPE-114		Industrial Robotic Design								
	MPE-115		Non-Conventional Machining Process								
	MPE-116		Computer Aided Design								
5	LMPE-103	Core Course	Advanced Welding Process Laboratory	0	0	4	2	Practical	50	50	100
6	LMPE-104	Core Course	Mechanical and Morphological characterization Laboratory	0	0	4	2	Practical	50	50	100
7	LMPPE-101	Core Course	Project	0	0	4	2	Practical	50	50	100
8	MAC-106	Audit Course 2	Pedagogy Studies	2	0	0	0	Theory	50	-	50
Total				14	0	12	18		400	550	950

### 3<sup>rd</sup> Semester

Sr. No.	Code	Course Type	Course Name	Teaching Scheme			Credits	Type of Subject	Marks		
				L	T	P			Int.	Ext.	Total
1	MPE-XXX	Program Elective	<b>Program Elective V (Any one)</b>	3	0	0	3	Theory	50	100	150
	MPE-117		Operations Management								
	MEP-118		Materials Management								
	MPE-119		Advance Operations Research								
2	MOZZ-XXX	Open Elective	<b>Open Elective 1 (Any one)</b>	3	0	0	3	Theory	50	100	150
	MOPE-120		Industrial Safety								
	MOPE-121		Operations Research								
	MOPE-122		Composite Materials								
3	MPTPE-101	Pre-thesis	Formulation of research problem	0	0	20	10	Practical	100	100	200
Total				6	0	20	16		200	300	500

### 4<sup>th</sup> Semester

Sr. No.	Code	Course Type	Course Name	Teaching Scheme			Credits	Type of Subject	Marks		
				L	T	P			Int.	Ext.	Total
1	MTPE-101	Thesis	Thesis work	0	0	32	16	Practical	100	200	300
Total				0	0	32	16		100	200	300

### List of Electives

Audit course 1 & 2	List of Open Elective	Open Elective offered by Production Engineering
MAC-101 English for Research Paper Writing MAC-102 Disaster Management MAC-103 Sanskrit for Technical Knowledge MAC-104 Value Education MAC-105 Constitution of India MAC-106 Pedagogy Studies MAC-107 Stress Management by Yoga MAC-108 Personality Development through Life Enlightenment Skills.	1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Waste to Energy	MOPE-120 Industrial Safety MOPE-121 Operations Research MOPE-122 Composite Materials

**Note: Eight questions out of entire syllabus and well-distributed are to be set; students are required to attempt 5 questions.**