



**V Semester**

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1.	22ME501T	Heat Transfer	3	-	-	3	30	70	100
2.	22ME501P	Heat Transfer Lab	-	-	2	1	25	25	50
3.	22ME502T	Energy Conversion-I	3	-	-	3	30	70	100
4.	22ME503T	Design of Machine Elements	3	-	-	3	30	70	100
5.	22ME503P	Design of Machine Elements Lab	-	-	2	1	25	25	50
6.	22ME504T	Operation Research and Industrial Engineering	3	-	-	3	30	70	100
7.	22ME505T	Professional Elective - I	3	-	-	3	30	70	100
8.	22ME561O	Open Elective - I	3	-	-	3	30	70	100
9.	22H104	Foundational Humanities Elective	2	-	-	-	Audit		
10.	22AS502T	English for Engineers	2	-	-	2	15	35	50
11.	22ME506P	Technical Skill Development II**	-	-	2	1	50	-	50
12.	22ME507P	Career Development - III*	2	-	-	0	Audit		
<b>Total</b>			<b>24</b>	<b>-</b>	<b>6</b>	<b>23</b>	<b>295</b>	<b>505</b>	<b>800</b>

\* Career Development (Interpersonal Skills, Aptitude and logical thinking)

\*\* Technical Skill Development – Desirable to have industry skill enhancement

22ME561O	Open Elective - I	22H104	Foundational Humanities Elective
22ME561O	OE-I Automobile Engineering	22H104	Development of Societies
		22H104	Philosophy
ME505T	Professional Elective - I		
22ME505T(i)	PE-I Refrigeration and Air Conditioning		
22ME505T(ii)	PE-I Production and Operation Management		
22ME505T(iii)	PE-I Design Thinking		

		July 2024	1	Applicable for 2024-25
Chairman - BoS	Dean – Academics	Date of Release	Version	



# ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

## B. Tech. Scheme of Examination & Syllabus 2022-23

### MECHANICAL ENGINEERING

#### VI Semester

Sr No	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Continual Assessment	End Sem Examination	Total
1	22ME601T	Energy Conversion-II	3	1	-	4	30	70	100
2	22ME601P	Thermal Engineering Lab	-	-	2	1	25	25	50
3	22ME602T	Professional Elective - II	3	-	-	3	30	70	100
4	22ME603T	Professional Elective - III	3	-	-	3	30	70	100
5	22ME604T	Professional Elective - IV	3	-	-	3	30	70	100
6	22ME661O	Open Elective-II	3	-	-	3	30	70	100
7	22AS501T	Economics and Management	4	-	-	4	30	70	100
8	22ME606P	Project - I	-	-	2	1	50	-	50
9	22ME607T	Career Development-IV*	2	-	-	0	Audit		
10	22ME608P	Capstone Course – I **	-	-	2	1	25	25	50
<b>Total</b>			<b>21</b>	<b>1</b>	<b>6</b>	<b>23</b>	<b>280</b>	<b>470</b>	<b>750</b>

\* Career Development (Interpersonal Skills, Aptitude and logical thinking)

\*\* Capstone Course – I (Comprehensive knowledge gained in Mechanical Engineering)

22ME661O	Open Elective - II				
22ME661O	Entrepreneurship Development				
ME602T	Professional Elective - II	ME603T	Professional Elective - III	ME604T	Professional Elective -IV
22ME602T(i)	Heating Ventilation and Air Conditioning systems	22ME603T(i)	Passive Heating and Cooling of Buildings	22ME604T(i)	Energy Conservation in HVACR System and Components
22ME602T(ii)	Logistics and Supply Chain Management	22ME603T(ii)	Sustainable Production System	22ME604T(ii)	Advances in Project and Quality Management
22ME602T(iii)	Mechanical Vibrations	22ME603T(iii)	Computer Aided Design	22ME604T(iii)	Design of Mechanical Power Transmission system
22ME602T(iv)	Applied Industrial IoT	22ME603T(iv)	Piping Engineering	22ME604T(iv)	Fire and Life safety in Infrastructure

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