

<b>B. Tech. Mechanical Engineering - I Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	CY 101/ PH 102	Engineering Chemistry/ Engineering Physics	3-1-0	4	FC-C1	BSC
<b>2</b>	MA 101	Engineering Mathematics -I	3-1-0	4	FC-C2	BSC
<b>3</b>	EC 101/ EE 102	Basic Electronics Engineering/ Basic Electrical Engineering	3-1-0	4	FC-C3	ESC
<b>4</b>	CS 101/ ME101	Fundamentals of Computer Programming/ Engineering Mechanics	3-1-0	4	SEC 1	ESC
<b>5</b>	BS 101	Human Values & Buddhist Ethics	2-0-0	2	AECC 1	HSMC
<b>6</b>	EN 101	English Proficiency	2-0-0	2	AECC 2	HSMC
	<b>Practical Courses</b>					
<b>7</b>	CE 103*/ ME102**	Engineering Graphics/ Workshop Practice	1-0-2	2	SEC2	ESC
<b>8</b>	CY 103/ PH 104	Engineering Chemistry/ Engineering Physics	0-0-2	1	FC-C4	BSC
<b>9</b>	CS 181/ EN 151/	Computer Programming Lab/ Language Lab	0-0-2	1	SEC 3	ESC
<b>10</b>	EC 181/ EE 103	Basic Electronics Engg. Lab/ Basic Electrical Engg. Lab	0-0-2	1	FC-C5	ESC
<b>11</b>	GP	General Proficiency		NC		
		<b>Total Credits</b>		<b>25</b>		
		<b>Total Contact Hours</b>	<b>17-4-08</b>	<b>Note - * Considered as lab course</b>		

<b>B. Tech. Mechanical Engineering -II Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	PH 102/ CY 101	Engineering Physics/ Engineering Chemistry	3-1-0	4	FC-C6	BSC
<b>2</b>	MA 102	Engineering Mathematics -II	3-1-0	4	FC-C7	BSC
<b>3</b>	ME101/ CS 101	Engineering Mechanics/ Fundamentals of Computer Programming	3-1-0	4	FC-C8	ESC
<b>4</b>	EE 102/ EC 101	Basic Electrical Engineering/ Basic Electronics Engineering	3-1-0	4	FC-C9	ESC
<b>5</b>	ES 101	Environmental Studies	4-0-0	4	AECC 3	BSC
	<b>Practical Courses</b>					
<b>6</b>	ME102**/ CE103*	Workshop Practice/ Engineering Graphics	1-0-2	2	CC-C 1	ESC
<b>7</b>	PH 104/ CY 103	Engineering Physics/ Engineering Chemistry	0-0-2	1	FC-C10	BSC
<b>8</b>	CS 181/ EN 151/	Computer Programming Lab/ Language Lab	0-0-2	1	AECC 4	BSC
<b>9</b>	EE 103 / EC 181	Basic Electrical Engg. Lab/ Basic Electronics Engg. Lab	0-0-2	1	FC-C11	ESC
<b>10</b>	GP	General Proficiency		NC		
		<b>Total credits</b>		<b>25</b>		
		<b>Total Contact Hours</b>	<b>17-4-08</b>	<b>Note - ** Considered as lab course</b>		

<b>B. Tech. Mechanical Engineering - III Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	MA 201	Engineering Mathematics- III	3-1-0	4	FC-C12	BSC
<b>2</b>	ME 201	Theory of Production Processes -I	4-0-0	4	CC-C2	PCC
<b>3</b>	ME 203	Strength of Materials- I	3-1-0	4	CC-C4	PCC
<b>4</b>	ME 205	Engineering Thermodynamics	3-1-0	4	CC-C3	PCC
<b>5</b>	ME 207	Materials Engineering	4-0-0	4	CC-C5	PCC
	<b>Practical Courses</b>					
<b>6</b>	ME 209	Production Processes Lab -I	0-0-3	2	CC-C7	PCC
<b>7</b>	ME 211	Strength of Materials Lab	0-0-2	1	CC-C8	PCC
<b>8</b>	ME 213	Machine Drawing	1-0-2	2	CC-C6	PCC
<b>9</b>	GP	General Proficiency		NC		
		<b>Total Credits</b>		<b>25</b>		
		<b>Total Contact Hours</b>	<b>18-3-8</b>			

<b>B. Tech. Mechanical Engineering - IV Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	ME 202	Theory of Production Processes -II	4-0-0	4	CC-C12	PCC
<b>2</b>	ME 204	Strength of Materials- II	3-1-0	4	CC-C9	PCC
<b>3</b>	ME 206	Fluid Mechanics	3-1-0	4	CC-C11	PCC
<b>4</b>	ME 208	Kinematics of Machines	3-1-0	4	CC-C10	PCC
<b>5</b>	ME 210	Engineering Measurements & Metrology	3-0-0	3	CC-C13	PCC
<b>6</b>	ME 212	Automobile Engineering	3-0-0	3	CC-C14	PCC
	<b>Practical Labs</b>					
<b>7</b>	ME 214	Production Processes Lab -II	0-0-3	2	CC-C15	PCC
<b>8</b>	ME 216	Fluid Mechanics Lab	0-0-3	2	CC-C16	PCC
<b>9</b>	ME 218	Engineering Measurements & Metrology Lab	0-0-2	1	CC-C17	PCC
<b>10</b>	ME 220	Automobile Engineering Lab	0-0-2	1	CC-C18	PCC
<b>11</b>	GP	General Proficiency		NC		
		<b>Total Credits</b>		<b>27</b>		
		<b>Total Contact Hours</b>	<b>19-3-10</b>			

<b>B. Tech. Mechanical Engineering - V Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	ME 301	Design of Machine Elements –I	2-0-2	4	CC-C20	PCC
<b>2</b>	ME 303	Applied Thermodynamics	3-1-0	4	CC-C21	PCC
<b>3</b>	ME 305	Fluid Machines	2-1-0	3	CC-C22	PCC
<b>4</b>	ME 307	Dynamics of Machines	2-1-0	3	CC-C23	PCC
<b>5</b>	ME 309	Heat and Mass Transfer	3-1-0	4	CC-C19	PCC
<b>6</b>	ME 311	Mechanical Vibrations	3-0-0	3	CC-C24	PCC
	<b>Practical Labs</b>					
<b>7</b>	ME 313	Fluid Machines Lab	0-0-3	2	CC-C26	PCC
<b>8</b>	ME 315	Heat and Mass Transfer Lab	0-0-3	2	CC-C25	PCC
<b>9</b>	ME 317	Dynamics of Machines & Vibrations Lab	0-0-2	1	CC-C27	PCC
<b>10</b>	GP	General Proficiency		NC		
		<b>Total Credits</b>		<b>26</b>		
		<b>Total Contact Hours</b>	<b>15-4-10</b>			

<b>B. Tech. Mechanical Engineering - VI Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	ME 302	Design of Machine Elements –II	2-0-2	4	CC-C28	PCC
<b>2</b>	ME 304	IC Engines & Gas Turbines	3-1-0	4	CC-C30	PCC
<b>3</b>	ME 306	Refrigeration and Air Conditioning	3-1-0	4	CC-C29	PCC
<b>4</b>	ME 308	Computer Aided Design	2-1-0	3	CC-C31	PCC
	ME 310	Computer Aided Manufacturing	2-1-0	3		
<b>5</b>	ME 312	Industrial Management	3-0-0	3	CC-C32	PCC
	<b>Practical Courses</b>					
<b>6</b>	ME 314	IC Engines & Gas Turbines Lab	0-0-3	2	CC-C33	PCC
<b>7</b>	ME 316	Refrigeration and Air Conditioning Lab	0-0-2	1	CC-C35	PCC
<b>8</b>	ME 318	CAD/CAM Lab	0-0-3	2	CC-C34	PCC
<b>9</b>		Industrial Training - <b>(Min. 6 Weeks)</b> - Evaluation will be done in VII Semester				
<b>10</b>	GP	General Proficiency		NC		
		<b>Total Credits</b>		<b>26</b>		
		<b>Total Contact Hours</b>	<b>15-4-10</b>			

<b>B. Tech. Mechanical Engineering - VII Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
<b>Theory Courses</b>					<b>UGC</b>	<b>AICTE</b>
<b>1</b>	OE1	<b>Open Elective 1</b>	3-0-0	3	OE 1	OEC
<b>2</b>	DSE 1	<b>Departmental Elective 1</b>	3-0-0	3	DSE 1	PEC
<b>3</b>	DSE 2	<b>Departmental Elective 2</b>	3-0-0	3	DSE 2	PEC
<b>4</b>	DSE 3	<b>Departmental Elective 3</b>	3-0-0	3	DSE 3	PEC
<b>5</b>	--	<b>HSMC Course I</b>	3-0-0	3	AECC 5	HSMC
<b>Practical/Seminar/Project/Ind. Training Courses</b>						
<b>6</b>	ME 401	Project I	0-0-8	4	E-DP 1	PCC
<b>7</b>	ME 403	Seminar	0-0-4	2	SEC 4	PCC
<b>8</b>	ME 405	Industrial Training ( <b>Min. 4-6 Weeks</b> ) – Evaluation		5	E-DP 2	PCC
<b>9</b>	GP	General Proficiency		NC		
<b>Total Credits</b>					<b>26</b>	
<b>Total Contact Hours</b>			<b>15-1-12</b>			

<b>List of Open Elective 1</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>Generic Elective from other Department approved by Mech. Department</b>				
<b>Sample Courses are given below-</b>				
<b>1</b>	ES 417	Disaster Management	3-0-0	3
<b>2</b>	<b>MA 001</b>	<b>Machine Learning from Data Science</b>	3-0-0	3
<b>3</b>		<b>Cyber Security</b>	3-0-0	3
<b>4</b>			3-0-0	3

<b>List of Departmental Elective 1</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	ME 407	Production Planning and Control	3-0-0	3
<b>2</b>	ME 409	Tribology	3-0-0	3
<b>3</b>	<b>ME 411</b>	<b>Power Plant Engineering</b>	3-0-0	3

<b>List of Departmental Elective 2</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	ME 413	Maintenance Engineering	3-0-0	3
<b>2</b>	ME 415	Experimental Stress Analysis	3-0-0	3
<b>3</b>	<b>ME 417</b>	<b>Renewable Energy Resources</b>	3-0-0	3

<b>List of Departmental Elective 3</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	ME 419	<b>Non-conventional Manufacturing Processes</b>	3-0-0	3
<b>2</b>	ME 421	Reliability Engineering	3-0-0	3
<b>3</b>	ME 423	Design of Thermal Systems	3-0-0	3

<b>List of HSMC Course I</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	<b>ME 425</b>	<b>Basics of Operations Research</b>	3-0-0	3
<b>2</b>	MB 457	Organizational Behaviour	3-0-0	3
<b>3</b>	MB 451	Financial Accounting and Analysis	3-0-0	3
	EN 531	Language Culture and Society	3-0-0	3
		Any MOOC (NPTEL) Course	3-0-0	3

<b>B. Tech. Mechanical Engineering - VIII Semester</b>						
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>	<b>Course Type</b>	
	<b>Theory Courses</b>				<b>UGC</b>	<b>AICTE</b>
<b>1</b>	OE2	<b>Open Elective 2</b>	3-0-0	3	OE 2	OEC
<b>2</b>	DSE 4	<b>Departmental Elective 4</b>	3-0-0	3	DSE 4	PEC
<b>3</b>	DSE 5	<b>Departmental Elective 5</b>	3-0-0	3	DSE 5	PEC
		<b>HSMC Courses II</b>	3-0-0	3	AECC 6	HSMC
	<b>Practical/Seminar/Project Courses</b>					
<b>4</b>	ME 402	Project II	0-0-16	08	E-DP 3	PCC
	GP	General Proficiency		NC		
		<b>Total Credits</b>				
		<b>Total Contact Hours</b>	<b>12-0-16</b>	<b>20</b>		

<b>List of Open Elective 2</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
	<b>Generic Elective from other Department approved by Mech. Department</b> <b>Sample Courses are given below-</b>			
<b>1</b>	EE 413	Industrial Instrumentation and Automation	3-0-0	3
<b>2</b>	<b>EE 428</b>	<b>Machine Learning</b>	3-0-0	3
<b>3</b>	<b>ES 507</b>	<b>Waste Management</b>	3-0-0	3
<b>4</b>	MA 030	Finite Element Method for Partial Differential Equations	3-0-0	3

<b>List of Departmental Elective 4</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	<b>ME 404</b>	<b>Industrial Automation and Robotics</b>	3-0-0	3
<b>2</b>	ME 406	Engineering Optimization	3-0-0	3
<b>3</b>	ME 408	Solar Energy Technology	3-0-0	3

<b>List of Departmental Elective 5</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	<b>ME 410</b>	<b>Financial Management</b>	3-0-0	3
<b>2</b>	ME 412	Advance Synthesis of Machines	3-0-0	3
<b>3</b>	ME 414	Advanced Gas Dynamics	3-0-0	3

<b>List of HSMC Course II</b>				
<b>S. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L-T-P</b>	<b>Credits</b>
<b>1</b>	<b>MB 511/ ME 416</b>	<b>Total Quality Management</b>	3-0-0	3
<b>2</b>	<b>MB 513/ ME 418</b>	<b>Entrepreneurship Development</b>	3-0-0	3
<b>3</b>	EN 522	Advance Course in Communication	3-0-0	3
		Intellectual Property Rights Law	3-0-0	3
		Any MOOC (NPTEL) Course	3-0-0	3

**Total Credit from Semester I to VIII of B. Tech. Mech. Engg.: 200**