

**BVM Engineering College (An Autonomous Institution)****Mechanical Engineering Department****M. Tech. Machine Design****Semester 1**

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">5MD01</a>	<a href="#">Advanced Machine Design</a>	3	1	0	4	4
2	<a href="#">5MD02</a>	<a href="#">Computer Aided Design</a>	3	0	2	5	4
3	<a href="#">5MD03</a>	<a href="#">Advanced Mechanics of Solids</a>	3	1	0	4	4
4		Program Elective - I	3	0	2	5	4
5		Program Elective - II	3	0	0	3	3
<b>Total</b>			<b>15</b>	<b>2</b>	<b>4</b>	<b>21</b>	<b>19</b>

**Program Elective - I**

1	<a href="#">5MD41</a>	<a href="#">Industrial Tribology</a>	3	0	2	5	4
2	<a href="#">5MD42</a>	<a href="#">Vibrations and Noise</a>	3	0	2	5	4
3	<a href="#">5MD43</a>	<a href="#">Advanced Engineering Dynamics</a>	3	0	2	5	4

**Program Elective - II**

1	<a href="#">5MD44</a>	<a href="#">Machine Tool Design</a>	3	0	0	3	3
2	<a href="#">5MD45</a>	<a href="#">Design for Manufacture and Assembly</a>	3	0	0	3	3
3	<a href="#">5MD46</a>	<a href="#">Quality and Reliability Engineering</a>	3	0	0	3	3

**Semester 2**

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">5MD04</a>	<a href="#">Research Methodology and Experimental Techniques</a>	2	0	2	4	3
2	<a href="#">5MD05</a>	<a href="#">Finite Element Methods</a>	3	0	2	5	4
3	<a href="#">5MD06</a>	<a href="#">Geometric Dimensioning and Tolerancing</a>	3	0	0	3	3
4		Program Elective - III	3	0	2	5	4
5		Program Elective - IV	3	1	0	4	4
6	<a href="#">5MD07</a>	<a href="#">Technical Writing and Presentation Skill</a>	0	1	0	1	1
<b>Total</b>			<b>14</b>	<b>2</b>	<b>6</b>	<b>22</b>	<b>19</b>

**Program Elective - III**

1	<a href="#">5MD47</a>	<a href="#">Advanced Numerical Methods</a>	3	0	2	5	4
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2	<a href="#">5MD48</a>	<a href="#">Robotics and Control</a>	3	0	2	5	4
3	<a href="#">5MD49</a>	<a href="#">Design of Heat and mass transfer Equipments</a>	3	0	2	5	4

#### Program Elective - IV

1	<a href="#">5MD50</a>	<a href="#">Fracture Mechanics</a>	3	1	0	4	4
2	<a href="#">5MD51</a>	<a href="#">Piping System Design</a>	3	1	0	4	4
3	<a href="#">5MD52</a>	<a href="#">Design of Pressure Vessels</a>	3	1	0	4	4
4	<a href="#">5MD53</a>	<a href="#">Design of Material Handling Equipment</a>	3	1	0	4	4
5	<a href="#">5MD54</a>	<a href="#">Design Optimization Techniques</a>	3	1	0	4	4

#### Semester 3

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Program Elective - V	3	0	2	5	4
2		Open Elective	3	0	0	3	3
3	<a href="#">6MD31</a>	<a href="#">Dissertation - I</a>	0	0	20	20	10
<b>Total</b>			<b>6</b>	<b>0</b>	<b>22</b>	<b>28</b>	<b>17</b>

#### Program Elective - V

1	<a href="#">6MD41</a>	<a href="#">Rotor Dynamics</a>	3	0	2	5	4
2	<a href="#">6MD42</a>	<a href="#">Oil Hydraulics and Pneumatics</a>	3	0	2	5	4
3	<a href="#">6MD43</a>	<a href="#">Thermal System Design and Simulation</a>	3	0	2	5	4
4	<a href="#">6MD44</a>	<a href="#">Mechanics and Manufacturing of Composites</a>	3	0	2	5	4

#### Open Elective

1.	<a href="#">6CM81</a>	<a href="#">Strategic Management</a>	3	0	0	3	3
2.	<a href="#">6CM82</a>	<a href="#">Disaster Management</a>	3	0	0	3	3
3.	<a href="#">6EE81</a>	<a href="#">Renewable Energy Systems</a>	3	0	0	3	3
4.	<a href="#">6EN81</a>	<a href="#">Rural Sanitation</a>	3	0	0	3	3
5.	<a href="#">6EN82</a>	<a href="#">Analytical Methods for Environmental Monitoring</a>	3	0	0	3	3
6.	<a href="#">6IF81</a>	<a href="#">Infrastructure Technology and Management</a>	3	0	0	3	3
7.	<a href="#">6SE81</a>	<a href="#">Disaster Management and Mitigation</a>	3	0	0	3	3
8.	<a href="#">6TE81</a>	<a href="#">Road Safety and Environmental Impact Assessment</a>	3	0	0	3	3
9.	<a href="#">6TE82</a>	<a href="#">Transportation System Analysis</a>	3	0	0	3	3

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**Semester 4**

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<b>Sr. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>C</b>
1	<a href="#">6MD32</a>	<a href="#">Dissertation - II</a>	0	0	32	32	16
<b>Total</b>			<b>0</b>	<b>0</b>	<b>32</b>	<b>32</b>	<b>16</b>
<b>Total Credits Distributions</b>			<b>35</b>	<b>4</b>	<b>64</b>	<b>103</b>	<b>71</b>

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