

**BVM Engineering College (An Autonomous Institution)**

**Mechanical Engineering Department**

**B. Tech.(Mechanical Engineering)**

**Semester 1**

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">BS111*</a>	<a href="#">Advanced Calculus</a>	3	1	0	4	4
2	<a href="#">ES106</a>	<a href="#">Programming for Engineers</a>	1	0	4	5	3
3	<a href="#">ES109</a>	<a href="#">Engineering Graphics &amp; Design</a>	2	0	4	6	4
4	<a href="#">ES115</a>	<a href="#">Basic Civil Engineering</a>	3	0	2	5	4
5	<a href="#">HS101</a>	<a href="#">English</a>	2	0	2	4	3
<b>Total</b>			<b>11</b>	<b>1</b>	<b>12</b>	<b>24</b>	<b>18</b>

\*For Students admitted in AY 2018-19, [BS101](#) (LTP:3,2,0)

**Semester 2**

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">BS112#</a>	<a href="#">Linear Algebra and Fourier Series</a>	3	1	0	4	4
2	<a href="#">BS103</a>	<a href="#">Physics</a>	3	0	2	5	4
3	<a href="#">ES103</a>	<a href="#">Basic Electrical Engineering</a>	3	0	2	5	4
4	<a href="#">ES110</a>	<a href="#">Basic Mechanical Engineering</a>	3	0	2	5	4
5	<a href="#">ES111</a>	<a href="#">Workshop</a>	0	0	4	4	2
6	<a href="#">HS112\$</a>	<a href="#">Environmental Science#</a>	2	0	0	2	0
<b>Total</b>			<b>14</b>	<b>1</b>	<b>10</b>	<b>25</b>	<b>18</b>

# For Students admitted in AY 2018-19, [BS102](#) (LTP:3,2,0)

\$ For Students admitted in AY 2018-19, [HS102](#) (LTP:2,2,0)

# Non-Credit Mandatory course

### Semester 3

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">2ES02</a>	<a href="#">Mechanics of Solids</a>	3	1	0	4	4
2	<a href="#">2ME01</a>	<a href="#">Numerical Methods and Analysis</a>	3	1	0	4	4
3	<a href="#">2ME02</a>	<a href="#">Engineering Thermodynamics</a>	3	0	0	3	3
4	<a href="#">2ME03</a>	<a href="#">Material Science and Metallurgy</a>	3	0	2	5	4
5	<a href="#">2ME11</a>	<a href="#">Industrial Psychology, sociology and Work ethics</a>	2	0	0	2	2
6	<a href="#">2ME04</a>	<a href="#">Mechanical Measurement and Instrumentation</a>	3	0	2	5	4
7	<a href="#">2ME05</a>	<a href="#">Machine Drawing</a>	0	0	4	4	2
<b>Total</b>			<b>17</b>	<b>2</b>	<b>8</b>	<b>27</b>	<b>23</b>

### Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">2ME06</a>	<a href="#">Kinematics of Machines</a>	3	1	0	4	4
2	<a href="#">2ME07</a>	<a href="#">Innovative Practices</a>	0	0	2	2	1
3	<a href="#">2ME08</a>	<a href="#">Fluid Mechanics and Fluid Machines</a>	3	0	2	5	4
4	<a href="#">2ME09</a>	<a href="#">Design of Machine Elements</a>	3	1	0	4	4
5	<a href="#">2ME10</a>	<a href="#">Heat Transfer</a>	3	0	2	5	4
6	<a href="#">2BS02</a>	<a href="#">Differential Equations and Statistics</a>	3	1	0	4	4
7	<a href="#">2HS01</a>	<a href="#">Professional Soft Skills</a>	1	0	2	3	2
<b>Total</b>			<b>16</b>	<b>3</b>	<b>8</b>	<b>27</b>	<b>23</b>
	<a href="#">MEIS1</a>	<a href="#">Internship - I (Two Weeks)#</a>	-	-	-	-	0

# Non-Credit Mandatory course

### Semester 5

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">3ME01</a>	<a href="#">Dynamics of Machines</a>	3	0	2	5	4
2	<a href="#">3ME02</a>	<a href="#">Machining Processes</a>	3	0	2	5	4
3	<a href="#">3ME03</a>	<a href="#">I. C. Engines and Thermal Turbines</a>	3	0	2	5	4
4		Open Elective - I	3	0	0	3	3
5	<a href="#">3ME04</a>	<a href="#">Computer Aided Design</a>	3	0	2	5	4
6	<a href="#">3HS01</a>	<a href="#">Ethics and Constitution of India#</a>	2	0	0	2	0
<b>Total</b>			<b>17</b>	<b>0</b>	<b>8</b>	<b>25</b>	<b>19</b>

# Non-Credit Mandatory course

#### Open Elective - I

1.	<a href="#">3CE81</a>	<a href="#">Environment And Health</a>	3	0	0	3	3
2.	<a href="#">3CE83</a>	<a href="#">Earth System and Geo-environment</a>	3	0	0	3	3
3.	<a href="#">3SE81</a>	<a href="#">Disaster Management and Mitigation</a>	3	0	0	3	3
4.	<a href="#">3CP81</a>	<a href="#">Fundamentals of Computer Networks and Security</a>	3	0	0	3	3
5.	<a href="#">3CP82</a>	<a href="#">Fundamentals of Operating Systems</a>	3	0	0	3	3
6.	<a href="#">3IT81</a>	<a href="#">Cyber security</a>	3	0	0	3	3
7.	<a href="#">3IT82</a>	<a href="#">Internet Technology</a>	3	0	0	3	3
8.	<a href="#">3IT83</a>	<a href="#">Software Project Management</a>	3	0	0	3	3
9.	<a href="#">3IT84</a>	<a href="#">Enterprise Resource Planning</a>	3	0	0	3	3
10.	<a href="#">3EE81</a>	<a href="#">Energy Audit &amp; Conservation</a>	3	0	0	3	3
11.	<a href="#">3EE83</a>	<a href="#">Installation and Commissioning of Electrical Equipments</a>	3	0	0	3	3
12.	<a href="#">3EL81</a>	<a href="#">Electronic Communication System</a>	3	0	0	3	3
13.	<a href="#">3EC81</a>	<a href="#">Introduction to Cellular Communication</a>	3	0	0	3	3
14.	<a href="#">3EC82</a>	<a href="#">Applied Electronics</a>	3	0	0	3	3

L=Lecture Hrs./wk; T=Tutorial Hrs./wk; P=Practical Hrs./wk; H=Total Contact Hrs./wk; C=Credits of Course

## Semester 6

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">3ME05</a>	<a href="#">Control Engineering</a>	3	0	0	3	3
2	<a href="#">3ME06</a>	<a href="#">Entrepreneurship</a>	2	0	0	2	2
3	<a href="#">3ME07</a>	<a href="#">Metal Forming, Joining and Foundry Practices</a>	3	0	2	5	4
4	<a href="#">3ME08</a>	<a href="#">Computer Aided Manufacturing</a>	3	0	2	5	4
5		Program Elective - I	3	1	0	4	4
6		Open Elective - II	3	0	2	5	4
<b>Total</b>			<b>17</b>	<b>1</b>	<b>6</b>	<b>24</b>	<b>21</b>

### Program Elective - I

1	<a href="#">3ME41</a>	<a href="#">Energy Conservation and Management</a>	3	1	0	4	4
2	<a href="#">3ME42</a>	<a href="#">Total Productive Maintenance</a>	3	1	0	4	4
3	<a href="#">3ME43</a>	<a href="#">Operation Research</a>	3	1	0	4	4
4	<a href="#">3ME44</a>	<a href="#">Gas Dynamics and Propulsive system</a>	3	1	0	4	4
5	<a href="#">3ME45</a>	<a href="#">Finite Element Method</a>	3	1	0	4	4

### Open Elective - II

1.	<a href="#">3CE82</a>	<a href="#">Geo-Informatics</a>	3	0	2	5	4
2.	<a href="#">3SE82</a>	<a href="#">Advanced Strength of Materials</a>	3	0	2	5	4
3.	<a href="#">3SE83</a>	<a href="#">Basic Concepts of Structural Behaviour</a>	3	0	2	5	4
4.	<a href="#">3CP85</a>	<a href="#">Object Oriented Concepts and Programming</a>	3	0	2	5	4
5.	<a href="#">3CP84</a>	<a href="#">Information Technology Essentials</a>	3	0	2	5	4
6.	<a href="#">3CP83</a>	<a href="#">Programming with Python</a>	3	0	2	5	4
7.	<a href="#">3IT85</a>	<a href="#">Web Application and Development</a>	3	0	2	5	4
8.	<a href="#">3IT86</a>	<a href="#">Java Programing</a>	3	0	2	5	4
9.	<a href="#">3IT87</a>	<a href="#">Object Oriented Programming with C++</a>	3	0	2	5	4
10.	<a href="#">3IT88</a>	<a href="#">Mobile Application Development</a>	3	0	2	5	4
11.	<a href="#">3EE82</a>	<a href="#">Renewable Energy Technology</a>	3	0	2	5	4

L=Lecture Hrs./wk; T=Tutorial Hrs./wk; P=Practical Hrs./wk; H=Total Contact Hrs./wk; C=Credits of Course

12.	<a href="#">3EE84</a>	<a href="#">Industrial Automation</a>	3	0	2	5	4
13.	<a href="#">3EL82</a>	<a href="#">Basics of Embedded and IoT Systems</a>	3	0	2	5	4
14.	<a href="#">3EL83</a>	<a href="#">Sensor Technology</a>	3	0	2	5	4
15.	<a href="#">3EC83</a>	<a href="#">Embedded Systems and IOT</a>	3	0	2	5	4

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<a href="#">MEIS2</a>	<a href="#">Internship-II</a> (Three Weeks)#	-	-	-	-	0
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# Non-Credit Mandatory course

### Semester 7

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	<a href="#">4ME01</a>	<a href="#">Refrigeration, Air-conditioning and Compressors</a>	3	0	2	5	4
2	<a href="#">4ME02</a>	<a href="#">Production Technology</a>	3	0	2	5	4
3		Program Elective - II	3	0	0	3	3
4		Program Elective - III	3	1	0	4	4
5	<a href="#">4ME32</a>	<a href="#">Minor Project – I</a>	0	0	16	16	8
<b>Total</b>			<b>12</b>	<b>1</b>	<b>20</b>	<b>33</b>	<b>23</b>

### Program Elective – II

1	<a href="#">4ME41</a>	<a href="#">Design Optimization</a>	3	0	0	3	3
2	<a href="#">4ME42</a>	<a href="#">Design of Material Handling Equipment</a>	3	0	0	3	3
3	<a href="#">4ME43</a>	<a href="#">Power Plant Engineering</a>	3	0	0	3	3
4	<a href="#">4ME44</a>	<a href="#">Design of Heat Exchangers</a>	3	0	0	3	3
5	<a href="#">4ME45</a>	<a href="#">Mechatronics Systems</a>	3	0	0	3	3
6	<a href="#">4ME46</a>	<a href="#">Advanced Fluid Mechanics</a>	3	0	0	3	3
7	<a href="#">4ME47</a>	<a href="#">Industrial Tribology</a>	3	0	0	3	3
8	<a href="#">4ME48</a>	<a href="#">Project Management</a>	3	0	0	3	3
9	<a href="#">4ME67</a>	<a href="#">Supply Chain Management</a>	3	0	0	3	3
10	<a href="#">4ME66</a>	<a href="#">Research Methodology</a>	3	0	0	3	3

### Program Elective - III

1	<a href="#">4ME49</a>	<a href="#">Design of Transmission system</a>	3	1	0	4	4
2	<a href="#">4ME50</a>	<a href="#">Design of Thermal Systems</a>	3	1	0	4	4
3	<a href="#">4ME51</a>	<a href="#">Production and Operations Management</a>	3	1	0	4	4
4	<a href="#">4ME52</a>	<a href="#">Precision Manufacturing</a>	3	1	0	4	4

### Semester 8

1	<a href="#">4ME33</a>	<a href="#">Minor Project – II</a>	0	0	14	14	7
2		Program Elective – IV	3	0	2	5	4
3		Program Elective – V	3	0	2	5	4
<b>Total</b>			<b>6</b>	<b>0</b>	<b>18</b>	<b>24</b>	<b>15</b>

### Program Elective - IV

1	<a href="#">4ME53</a>	<a href="#">Product Engineering</a>	3	0	2	5	4
2	<a href="#">4ME54</a>	<a href="#">Machine Tool Design</a>	3	0	2	5	4
3	<a href="#">4ME55</a>	<a href="#">Automobile Engineering</a>	3	0	2	5	4
4	<a href="#">4ME56</a>	<a href="#">Turbomachinery</a>	3	0	2	5	4
5	<a href="#">4ME57</a>	<a href="#">Additives Manufacturing</a>	3	0	2	5	4
6	<a href="#">4ME58</a>	<a href="#">Design of Pressure Vessels</a>	3	0	2	5	4
7	<a href="#">4ME65</a>	<a href="#">Smart Manufacturing for Industry 4.0</a>	3	0	2	5	4

### Program Elective – V

1	<a href="#">4ME59</a>	<a href="#">Geometric Dimensioning and Tolerancing</a>	3	0	2	5	4
2	<a href="#">4ME60</a>	<a href="#">Industrial Robotics</a>	3	0	2	5	4
3	<a href="#">4ME61</a>	<a href="#">Renewable Energy Engineering</a>	3	0	2	5	4
4	<a href="#">4ME62</a>	<a href="#">Computational fluid dynamics</a>	3	0	2	5	4
5	<a href="#">4ME63</a>	<a href="#">Oil Hydraulics and Pneumatics</a>	3	0	2	5	4
6	<a href="#">4ME64</a>	<a href="#">Industrial Automation</a>	3	0	2	5	4

OR

### Semester 8

1	<a href="#">4ME31</a>	<a href="#">Industrial Project</a>	0	0	30	30	15
<b>Total</b>			<b>0</b>	<b>0</b>	<b>30</b>	<b>30</b>	<b>15</b>

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**Total Credits Distribution**

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**110 9 90 209 160**

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