

Information of every subject	
1	Unit name: -Internal Combustion Engine
2	Code: ME-51023
3	Classification: Engineering subject
4	Credit value: 3
5	Semester/ Year Offered: 1/2
6	Pre-requisite:
7	Mode of delivery: Lecture, Practical, Tutorial, Viva
8	Practical 20%
	Tutorials 5%
	Viva 5%
	Mid-term/ final Examination 35% / 35%
9	Academic staff teaching unit:
10	<p>Course outcome of unit: In this course, students will be able</p> <p>Semester (I)</p> <ul style="list-style-type: none"> a. To explain in the combustion process in the engine. b. To explain the difference between operation and construction of the spark-ignition and compression-ignition engine. c. To compute how to increase the engine power. d. To describe the operation of a sequential electronic fuel injection system. <p>Semester (II)</p> <ul style="list-style-type: none"> e. To explain the difference combustion process of both spark-ignition and compression-ignition engine. f. To classify the effect of lubricating system and cooling system on engine. g. To discuss the phenomenon of air circle analysis and thermal efficiency. h.
11	<p>Synopsis of unit: This unit deals with the relationship between the internal combustion engine because fuel is burned inside the engine to make power . The internal combustion engine</p>

	offers a relatively small, lightweight source for the amount of power it produce...An important device based on the internal combustion engine is the automobile..																																		
12	<p>Topic:</p> <p>Semester (I)</p> <table border="1"> <thead> <tr> <th>Chapter</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>General Introduction to IC Engines</td> </tr> <tr> <td>2</td> <td>Basic Engine Performance Parameters and Road Load Performance</td> </tr> <tr> <td>3</td> <td>Air Cycle Analysis</td> </tr> <tr> <td>4</td> <td>Fuel Air Analysis</td> </tr> <tr> <td>5</td> <td>Actual Cycles and Their analysis Fuels</td> </tr> <tr> <td>6</td> <td>Fuels</td> </tr> <tr> <td>7</td> <td>Carburetion and carburetors</td> </tr> <tr> <td>8</td> <td>Electronic Fuel Injection</td> </tr> </tbody> </table> <p>Semester (II)</p> <table border="1"> <tbody> <tr> <td>9</td> <td>Ignition Systems</td> </tr> <tr> <td>10</td> <td>Fuel Injection System</td> </tr> <tr> <td>11</td> <td>Combustion in Spark-Ignition Engines</td> </tr> <tr> <td>12</td> <td>Combustion in Compression Ignition Engines</td> </tr> <tr> <td>13</td> <td>Engine Friction and Lubrication</td> </tr> <tr> <td>14</td> <td>Cooling Systems</td> </tr> <tr> <td>15</td> <td>Introduction to Supercharging and Turbocharging</td> </tr> <tr> <td>16</td> <td>Two Stroke Engines</td> </tr> </tbody> </table>	Chapter	Title	1	General Introduction to IC Engines	2	Basic Engine Performance Parameters and Road Load Performance	3	Air Cycle Analysis	4	Fuel Air Analysis	5	Actual Cycles and Their analysis Fuels	6	Fuels	7	Carburetion and carburetors	8	Electronic Fuel Injection	9	Ignition Systems	10	Fuel Injection System	11	Combustion in Spark-Ignition Engines	12	Combustion in Compression Ignition Engines	13	Engine Friction and Lubrication	14	Cooling Systems	15	Introduction to Supercharging and Turbocharging	16	Two Stroke Engines
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14	<p>Main references:</p> <p>"Internal Combustion Engine Fundamentals by John B.Heywood. 'DR. V GANESAN.2011,Third Edition</p>																																		
15	<p>Additional references:</p> <p>'DR. V GANESAN.2011,Third Edition 'Tata McGraw Hill, New Delhi. 'U Sein Win.2004, Internal Combustion Engines(ME-5023),Ministry of Science and Technology</p>																																		

