

## B. Tech. (Plastics Technology) Revised Syllabus w.e.f. 2009-10

Course Code	Title of Course	Teaching Hours	Credits	Practical Hours	Credits	Total Credits
<b>First Semester</b>						
<b>BSL-101</b>	<b>Mathematics-I</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04.0</b>
<b>BSC-102</b>	<b>Organic Chemistry-I</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>ESC-101</b>	<b>Workshop Technology</b>	<b>02</b>	<b>02</b>	<b>04</b>	<b>2.0</b>	<b>4.0</b>
<b>BSC-103</b>	<b>Physical Chemistry</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>ESC-102</b>	<b>Computer Science and Application</b>	<b>02</b>	<b>02</b>	<b>02</b>	<b>01</b>	<b>03.0</b>
<b>ESL-106</b>	<b>Material Technology</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04.0</b>
<b>Total</b>		<b>20</b>	<b>20</b>	<b>12</b>	<b>6.0</b>	<b>26.0</b>
<b>Second Semester</b>						
<b>ESC-103</b>	<b>Electrical Engineering and Electronics</b>	<b>04</b>	<b>04</b>	<b>02</b>	<b>1</b>	<b>05</b>
<b>BSC-104</b>	<b>Inorganic Chemistry</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>BSC-105</b>	<b>Physics</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>ESL-104</b>	<b>Generation and Transmission of Mechanical Power</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>ESC-105</b>	<b>Engineering Graphics</b>	<b>02</b>	<b>02</b>	<b>03</b>	<b>1.5</b>	<b>3.5</b>
<b>HMC-101</b>	<b>Communication &amp; Soft Skill</b>	<b>03</b>	<b>03</b>	<b>01</b>	<b>0.5</b>	<b>3.5</b>
<b>Total</b>		<b>21</b>	<b>21</b>	<b>12</b>	<b>06</b>	<b>27.0</b>
<b>Third Semester</b>						

<b>BSL-201</b>	<b>Mathematics-II</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>CHC-202</b>	<b>Mechanical Operations</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>CHL-205</b>	<b>Chemical Engineering Thermodynamics</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>CHC-206</b>	<b>Heat Transfer</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>PLL-201</b>	<b>Introduction to Polymer Technology</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>PLP - 202</b>	<b>Polymer Identification and Analysis</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>1.5</b>	<b>1.5</b>
<b>HML-201</b>	<b>Industrial Management &amp; Economics</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>Total</b>		<b>20</b>	<b>20</b>	<b>10</b>	<b>05</b>	<b>28.5</b>
<b>Forth Semester</b>						
<b>ESC-201</b>	<b>Applied and Structural Mechanics</b>	<b>04</b>	<b>04</b>	<b>02</b>	<b>01</b>	<b>05</b>
<b>BSC-202</b>	<b>Organic Chemistry- II</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>CHC-203</b>	<b>Momentum Transfer</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>CHL-204</b>	<b>Process Calculations</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>PLC-203</b>	<b>Polymerization Kinetics</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>PLP - 204</b>	<b>Synthesis and Characterization of Polymers</b>	<b>-</b>	<b>-</b>	<b>06</b>	<b>03</b>	<b>03</b>

<b>Total</b>		<b>20</b>	<b>20</b>	<b>14</b>	<b>7.0</b>	<b>27.0</b>
<b>Fifth Semester</b>						
<b>CHC308</b>	<b>Mass Transfer Operations</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>CHC-309</b>	<b>Instrumentation and Process Control</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>PLC-301</b>	<b>Chemistry and Technology of Polymers - I</b>	<b>04</b>	<b>04</b>			<b>04</b>
<b>PLP - 302</b>	<b>Polymer Synthesis and Analysis</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>1.5</b>	<b>1.5</b>
<b>PLL-303</b>	<b>Chemistry &amp; Technology of Polymers-II</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>PLP-304</b>	<b>Synthesis of Thermosets</b>	<b>-</b>	<b>-</b>	<b>06</b>	<b>03</b>	<b>03</b>
<b>ELECTIVE</b>	<b>Elective-I</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>Total</b>		<b>20</b>	<b>20</b>	<b>15</b>	<b>7.5</b>	<b>27.5</b>
<b>Sixth Semester</b>						
<b>ESC-301</b>	<b>Machine Design &amp; Drawing</b>	<b>02</b>	<b>02</b>	<b>03</b>	<b>1.5</b>	<b>3.5</b>
<b>CHL-310</b>	<b>Reaction Engineering</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>HML-301</b>	<b>Managerial Behavior: Psycho-social Dimensions</b>	<b>03</b>	<b>03</b>	<b>-</b>	<b>-</b>	<b>03</b>
<b>PLC-305</b>	<b>Processing of</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>

	<b>Plastics - I</b>					
<b>PLL-306</b>	<b>Mould and Die Design</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>04</b>	<b>04</b>
<b>PLP-307</b>	<b>Self Study Report</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>1.5</b>	<b>1.5</b>
<b>ELECTIVE</b>	<b>Elective - II</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>Total</b>		<b>21</b>	<b>21</b>	<b>09</b>	<b>4.5</b>	<b>25.5</b>
<b>Seventh Semester</b>						
<b>PLP-401</b>	<b>Industrial Training/ Project</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>15</b>	<b>15</b>
<b>PLP-402</b>	<b>Technical Seminar &amp; Colloquium</b>	<b>-</b>	<b>-</b>	<b>06</b>	<b>03</b>	<b>03</b>
<b>Total</b>		<b>-</b>	<b>-</b>	<b>36</b>	<b>18</b>	<b>18</b>
<b>Eighth Semester</b>						
<b>CHL-405</b>	<b>Project Engineering &amp; Economics</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>CHP-406</b>	<b>Process Equipment Design</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>1.5</b>	<b>1.5</b>
<b>PLC-403</b>	<b>Processing of Plastics - II</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>1.5</b>	<b>5.5</b>
<b>PLC-404</b>	<b>Polymer Testing</b>	<b>04</b>	<b>04</b>	<b>06</b>	<b>03</b>	<b>07</b>
<b>Elective</b>	<b>Elective-III</b>	<b>04</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>04</b>
<b>Total</b>		<b>16</b>	<b>16</b>	<b>12</b>	<b>6.0</b>	<b>22.0</b>