1. PLASTIC PART DESIGN
   - Design Features – Wall thickness, ribs, bosses, radii, fillets, draft, holes, undercut, and threads.
   - Reverse engineering using contact type micro scribe and Rhinoceros software.
   - Dimensional analysis using ATOS compact scan 2M-3D.
   - Free-form surface measurement using CMM.

2. INJECTION MOULD CONSTRUCTION
   - Fundamental construction of mould – parting line, mould plates, sprue bush, locating ring, core and cavity, guide pillar & guide bush, bolsters, mould venting, feed system, ejection system, pressure and temperature control system and process variables.
   - Injection mould classification and Injection mould detailing using real-world production models.
   - Tryout of an injection mould using high-fidelity scaled prototypes.

3. INJECTION MOULD DESIGN
   - Classification of injection moulding machines, machine specifications, selection of machine, and tonnage calculations.
   - Selection of materials, industrial standards, and standard components using manufacturer catalogs for an injection mould.
   - Design and development of an Injection mould.
   - Finite element analysis of an injection mould.
   - Computer-aided detail drawing of an injection mould assembly.
   - Gather information from the injection mould blueprint regarding manufacturing processes, GD & T, and materials to fabricate the mould elements.
   - Injection mould production cost estimation.
   - Mould making – Bench fitting.
   - Acceptance of an injection mould based on process capability.
   - Injection moulding defect analysis.

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<table>
<thead>
<tr>
<th>Duration</th>
<th>40 Hours</th>
<th>Full Time</th>
<th>9.30 am to 4.30 pm</th>
<th>Course Fee</th>
<th>₹ 40,000 including GST</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Part Time</td>
<td>4.30 pm to 7.30 pm</td>
<td></td>
<td>Target audience: UG &amp; PG Students, Research scholars, Faculty, Staff and Practicing engineers.</td>
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</tbody>
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For Queries:
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