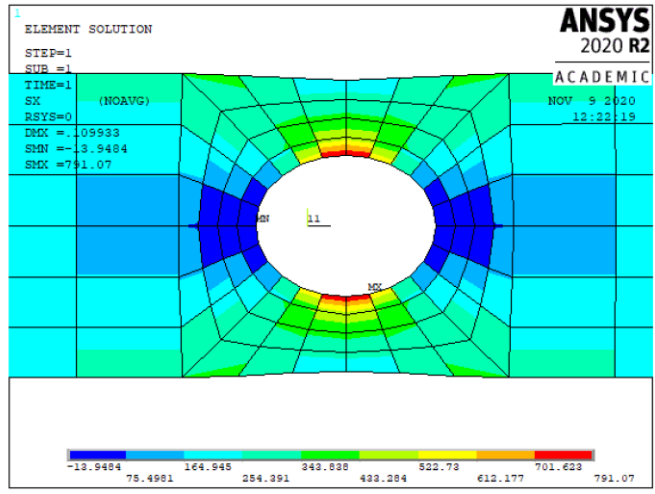
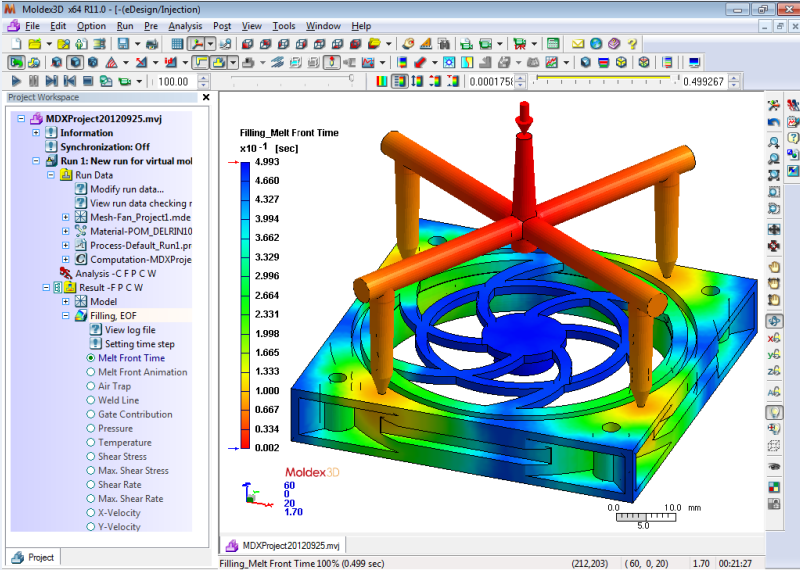
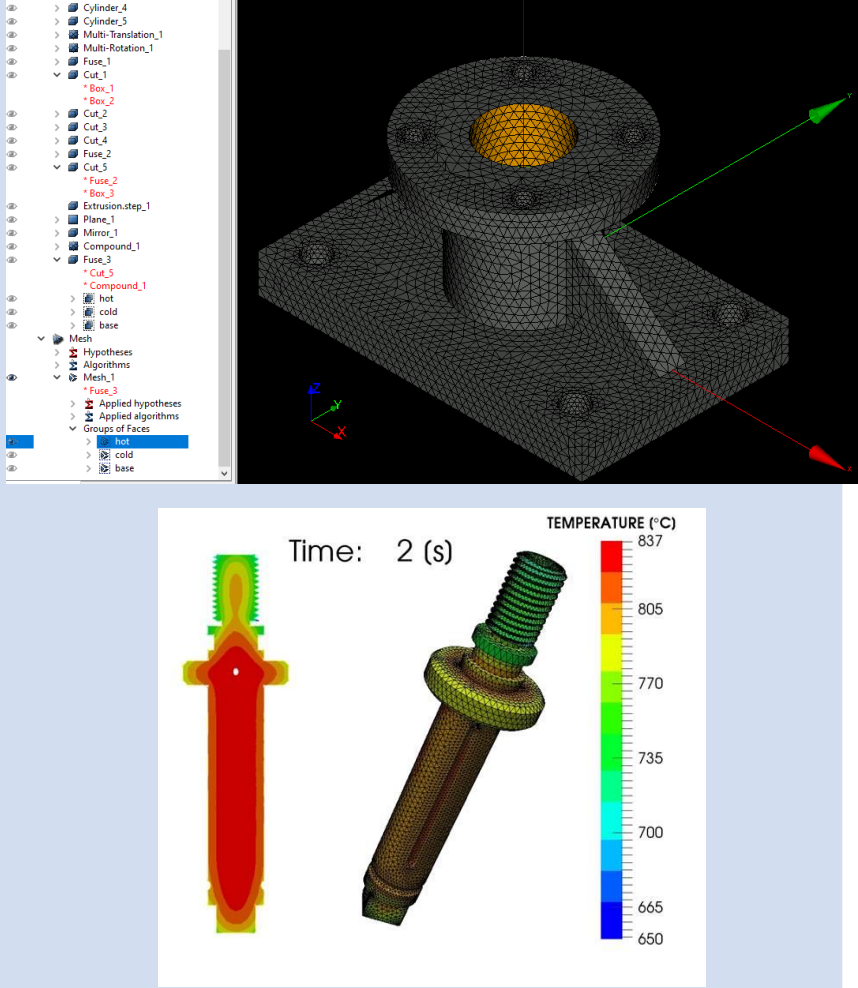


Materials and Production Process Simulation Laboratory (56h)

Activity	Instrument	Student action	
<p>Determination of the tensional state on a perforated plate subjected to tension. (16h)</p>	<p>Ansys Mechanical APDL</p>	<p>Implementation of the numerical model and critical evaluation of the results.</p>	
<p>Injection molding simulation of plastic parts. (20h)</p>	<p>Moldex 3D</p>	<p>Mould design, material selection and evaluation of process parameters</p>	

Activity	Instrument	Student action	
<p style="text-align: center;">Resolution of stationary and non-linear transient heat exchange problems. (20h)</p>	<p style="text-align: center;">Salome – Code_Aster</p>	<p style="text-align: center;">Selection and resolution of two case studies (one steady-state and one non-linear transient), with investigation of the thermal properties of the material and heat transfer coefficients</p>	 <p>The image displays a 3D mesh of a mechanical part, likely a bolt or nut, with a yellow mesh on the top surface. A coordinate system (X, Y, Z) is visible. Below the mesh, a temperature distribution plot is shown, labeled 'Time: 2 (s)'. The plot shows a cross-section of the part with a color scale for temperature in degrees Celsius, ranging from 650 to 837. The temperature is highest (red) at the top surface and lowest (blue) at the bottom surface.</p>