



<b>Program and Degree: BSc in Aerospace Engineering</b>	
<b>Course Description</b>	
<b>Course Title</b>	<b>Fluid mechanics laboratory</b>
<b>Prerequisites</b>	Fluid mechanics
<b>The course aims</b>	<ul style="list-style-type: none"> <li>- Ability to perform and design standard fluid test properties</li> <li>- Understanding the behavior of the fluids under the influence of forces</li> <li>- Ability to calibrate measurement device, analysis experimental data.</li> </ul>
<b>Contents</b>	<ul style="list-style-type: none"> <li>- Introduction to flow measurement device and its usages</li> <li>- Pressure drop test in pipes, sudden expansion, Elbow, valves.</li> <li>- Drive Performance curve of centrifugal pump and axial fans.</li> <li>- Hydrostatic force on surface</li> <li>- Verification Bernoulli equation</li> <li>- Hydrostatic Force of a free jet</li> <li>- See laminar and turbulent flow</li> <li>- Rotating and non-rotating flow</li> <li>- Pitot-static tube test</li> </ul>
<b>Duration</b>	<b>1 Semester (16 weeks)</b>
<b>Course Hours</b>	<b>3 hours/week</b>
<b>Course Type</b>	<b>Required</b>