

DMX4410 Electrical & Pneumatic Machines

<b>Level</b>	4
<b>Course Code</b>	DMX4410
<b>Course Title</b>	Electrical & Pneumatic Machines
<b>Credit value</b>	4
<b>Core/Optional</b>	Core
<b>Course Aim/s</b>	Aim of this course is to provide basic principles of electrical machines, pneumatics and its application
<b>Course Learning Outcomes (CLO):</b>	<p>At the completion of this course student will be able to:</p> <p>CLO1: Explain the magnetism &amp; electro-magnetism principles used in electrical machines &amp; related devices.</p> <p>CLO2: Analyze the operating principles and characteristics of different type of DC and AC machines.</p> <p>CLO3: Examine AC and DC servo machines and their applications.</p> <p>CLO4: Select and use suitable electrical machines in different applications.</p> <p>CLO5: Design pneumatic &amp; electro-pneumatic systems with a sound knowledge of relevant principles.</p> <p>CLO6: Perform troubleshooting of pneumatic and electro-pneumatic systems.</p>
<b>Content</b>	<p><b>Outline Syllabus:</b></p> <p>Unit 1: Electrical Machines Unit 2: Pneumatics</p> <p><b>Laboratory work :</b></p> <ol style="list-style-type: none"> <li>1. DC motor(linear/rotary) operation</li> <li>2. AC motor operation</li> <li>3. Stepper motor operation</li> <li>4. Pneumatic circuit implementation</li> <li>5. Electro-Pneumatic circuit implementation</li> </ol>