

## DMX4307 Electrical Machines and Drives

<b>Level</b>	4
<b>Course Code</b>	DMX4307
<b>Course Title</b>	Electrical Machines and Drives
<b>Credit value</b>	3
<b>Core/Optional</b>	Core
<b>Course Aim/s</b>	Aim of this course is to provide principles of electrical machines motor drives and their applications
<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: Demonstrate the knowledge of the operating principles and characteristics of different type of DC machines and AC Machines.</p> <p>CLO3 Select and apply suitable electrical machines in different applications.</p> <p>CLO4: Demonstrate the knowledge of DC and AC motor drives and describe their operating principles.</p>
<b>Content</b>	<p><b>Outline Syllabus:</b></p> <p>Unit 1: Electromagnetic circuits  Unit 2: DC machines  Unit 3: AC machines  Unit 4: Motor Drives</p> <p><b>Laboratory work:</b></p> <ol style="list-style-type: none"> <li>1. Determination of the characterises of DC motor</li> <li>2. Determination of the characterises of AC motor</li> <li>3. Determination of the characterises of Stepper motor and perform speed control of stepper motor</li> <li>4. Speed control of DC Motor with aid of motor drives</li> <li>5. Speed control of AC Motor with aid of motor drives</li> </ol>