

DMX5316 Mechatronics Product Design

Level	5
Course Code	DMX5316
Course Title	Mechatronics Product Design
Credit value	3
Core/Optional	Core
Course Aim	To provide the students with experience on applying the concepts in electronic circuit design, mechanical design, prototyping, testing and debugging, system integration and hardware construction through a design and development of product.
Course Learning Outcomes (CLO):	<p>At the completion of this course student will be able to:</p> <p>CLO1: Demonstrate the knowledge of design procedures in the field of mechatronics applications.</p> <p>CLO2: Design and develop mechatronics products with the integration of knowledge gained from other engineering subjects.</p> <p>CLO3: Demonstrate the knowledge of prototyping, system integration and hardware construction in mechatronics engineering applications.</p> <p>CLO4: Apply the concepts of testing and debugging in mechatronics systems.</p>
Content	<p>Laboratory work</p> <ol style="list-style-type: none"> 1. PIC microcontroller programming 2. Atmel microcontroller (Arduino) programming 3. Stepper motor controlling