

## DMX7306 Intelligent Control Systems

<b>Level</b>	7
<b>Course Code</b>	DMX7306
<b>Course Title</b>	Intelligent Control Systems
<b>Credit value</b>	3
<b>Core/Optional</b>	Core
<b>Course Aim/s</b>	Aim of this course is to provide the theory and applications of intelligence controllers in the area of machine intelligence.
<b>Course Learning Outcomes (CLO):</b>	At the completion of this course student will be able to: CLO1: identify the different artificial intelligent systems CLO2: Demonstrate the knowledge of fuzzy neural network system modelling. CLO3: Design of fuzzy neural network control systems. CLO4: Apply fuzzy neural network techniques to solve control engineering problems.
<b>Content</b>	<p><b>Outline Syllabus:</b></p> <p>Unit 1: Fuzzy system modelling  Unit 2: Fuzzy control system  Unit 3: Neural Networks  Unit 4: Fuzzy neural networks</p> <p><b>Laboratory Work:</b></p> <ol style="list-style-type: none"> <li>1. Stability analysis of SISO control system</li> <li>2. Stability analysis of SIMO control system</li> <li>3. Stability analysis of MIMO control system</li> </ol> <p><b>Mini Project:</b></p> <p>Develop intelligent controller for a given system</p>