

## DMY7881 Engineering Research Project

<b>Level</b>	7
<b>Course Code</b>	DMY7880/DMY7881
<b>Course Title</b>	Engineering Research Project (Mechanical/Mechatronics Engineering)
<b>Credit value</b>	8
<b>Core/Optional</b>	Core
<b>Course Aim/s</b>	Aim of this course is to carry out an industry-based project during the final year, in order to demonstrate learners' exposure to professional engineering practice. It should also demand individual analysis and judgement, assessed independently from the work of others. Learners are encouraged to undertake Projects in their main discipline or to undertake projects of inter-disciplinary nature.
<b>Course Learning Outcomes (CLO):</b>	<p>At the completion of this course student will be able to:</p> <p>CLO1: To engage with selected information in the research literature to construct new knowledge related to the Research Question, the learner plans to investigate</p> <p>CLO2: To plan out the investigation of a complex engineering problem using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.</p> <p>CLO3: To display qualities and transferable skills as well as subject specific skills necessary to communicate successfully, to a specialist audience.</p> <p>CLO4: To construct/create/make/build knowledge based on established pre-knowledge and techniques, using the Scientific Method.</p> <p>CLO5: To apply suitable/recognised methods, tools and procedures when executing the work.</p> <p>CLO6: To demonstrate individual analysis and judgement based on reflective learning (Concrete Experience, Reflective Observations, Abstract Conceptualisation, and Active Experimentation)</p> <p>CLO7: To verify accuracy and relevance of the proposed methodology and research findings</p> <p>CLO8: To design and develop suitable concepts and models (graphical, mathematical, statistical, prototype) to analyse, interpret and communicate research findings .</p> <p>CLO9: To disseminate research findings in a professional and ethical manner.</p>
<b>Content</b>	The content is based on the nature of the selected project and the selected project must consist of a sufficient coverage and depth so that CLOs are achieved at the end of the project work.