DMX5314 Machine Vision

Level	Level 5
Course Code	DMX5314
Course Title	Machine Vision
Credit value	3
Core/Optional	Core
Course Aim/s	Aim of this course is to provide the theory and concepts of machine vision in the area of machine intelligence.
Course Learning Outcomes (CLO):	At the completion of this course student will be able to: CLO 1: Demonstrate the knowledge of concepts of 2D and 3D signals and systems. CLO 2: Describe the foundation of image formation, measurement, and analysis. CLO 3: Implement the common methods for robust image matching and alignment. CLO 4: Analzye images and determine the objects by scene recognition and categorization CLO 5: Develop the practical skills necessary to build machine vision applications.
Content	**Outline Syllabus:** Unit 1: Introduction to digital image processing Unit 2: Image improvement Unit 3: Image formation and pre-processing Unit 4: Feature extraction Unit 5: Image analysis **Mini project:** Mini project and viva based on vision system