1.	Title of the course	Computer Vision Laboratory
2.	Course number	EE507P
3.	Structure of credits	0-0-3-2
4.	Offered to	PG
5.	New course/modification to	Modification To EE5294/6
6.	To be offered by	Department of Electrical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	**Course Objective(s):** This Lab course enable students to learn implementing many Computer Vision algorithms. These would eventually enable them apply for may real world tasks such as Character recognition, face detection, recognition, Image stitching, 3D extraction, Segmentation etc. This helps them to analyse and infer many real world tasks, through associated images. The applications of these image based inferences in several fields such as medical to industrial will be understood.	
10.	**Course Content:** As the part of the Lab following experiments will be done by the students. 1. Key point or Interest point extraction. 2. Image Stitching and making penorama 3. Feature Descriptors for images or image patches 4. Bag of Visual words classifier 5. HoG for Human and Non-human classification. 6. Charterer recognition to Face Recognition 7. Stereo based Depth extraction 8. Optical Flow estimation 9. Visual Tracking 10. Segmentation.	
11.	**Textbook(s):** 1. Kenneth D, *A Practical Introduction to Computer Vision with OpenCV*, WILEY Publisher (2014).	
12.	**Reference(s):** 1. R Szeliski, *Computer vision: algorithms and applications*, Springer (2010).	