1.	Title of the course	Industrial Software Engineering
2.	Course number	CS522L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To CS5206/12
6.	To be offered by	Department of Computer Science and Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	**Course Objective(s):** To expose the students to industrial perspective of software engineering with a focus on modern software engineering principles and practices, and their application to develop tools and projects.	
10.	**Course Content:** Introduction to traditional software engineering, state of the art software engineering methodologies, modern software engineering process models (including agile-driven models), DevOps, configuration management (Git, version control systems), continuous integration, open source development models, software architecture styles, mining software repositories (software analytics and visualisation of various artefacts), software quality and metrics, end-to-end tool chain for software engineering.	
11.	**Textbook(s):** 1. Jez Humble, David Farley and Martin Fowle, *Continuous Delivery: Reliable Software Releases through BUild, Test, and Deployment Automation*, Pearson Education (2016).	
12.	**Reference(s):** 1. Chiristian bird, Tim Menzies and Thomas Zimmermann, *The Art and Science of Analyzing Software Data,* Morgan Kaufmann (2015). 2. Tim Menzies, Laurie Williams and Thomas Zimmermann, *Perspectives on Data Science for Software Engineering*, Morgan Kaufmann (2016).	