Name of the Programme : M.Sc. in Data Science
Course code : CSD-514
Title of the course : Software Engineering for AI Enabled Systems (Practical)
Number of credits : 2 (0L-0T-2P)
Contact hours : 60 hours (0L-0T-60P)
Effective from AY : 2023-24

Pre-requisites for the Course	Programming & Data Structures, Python	
Course Objectives	Applying SE approach to developing AI solutions Use of modern software engineering tools and frameworks	
Content	1 Version Control Tools- Git and Github	**12 hours**
	2 TDD –Unit testing and refactoring with Python	**12 hours**
	3 Working with Python libraries and frameworks	**12 hours**
	4 Use of testing tools- selenium, Jmeter	**12 hours**
	5 Cloud based software development &DevOps	**12 hours**
Pedagogy	Lab sessions and projects	
References/ Readings	1. Allbee, B. (2018). Hands-On Software Engineering with Python: Move beyond basic programming and construct reliable and efficient software with complex code. Packt Publishing Ltd. 2. Jalote, P. (2008). A concise introduction to software engineering. Springer Science & Business Media. 3. Cohn, M. (2005). Agile estimating and planning. Pearson Education.	
Course Outcomes	1. Application of SE principles for AI and Data Science projects 2. How to work in self-organizing teams 3. Use of tools and techniques for automating 4. Managing software development	