Name of the Programme: MCA
Course Code: CSA-527
Title of Course: Agile Methodology
Number of Credits: 4 (4L-0T-0P)
Effective from AY: 2022-23

Prerequisites for the course	Programming Knowledge	
Objectives	The objective of the course is to provide students with a theoretical as well as practical understanding of agile software development practices and how small teams can apply them to create high-quality software.	
Content	**Introduction to Agile Software Development:** Understanding how traditional software development works and it's problems; Role of Agile practices in the world of software development & Tools used **Agile Project Planning And Management:** Requirement Analysis, Estimation techniques, Iteration planning, Introduction to development practices: Test Driven Development(TDD) & Pair Programming, Introduction to QA Practices: Fail Fast & Automated functional testing, Introduction to Continuous Integration **Coding and testing practices:** Practicing TDD and pair programming as alternative to traditional documentation; Configuring Continuous Integration tools; Automated function testing in detail, Source Control **Agile Software development and deployment:** Iterative and incremental software development, Automated and scripted deployment strategies, Handling change requests	5 hours 30 hours 15 hours 10 hours
Pedagogy	Lectures/ Hands-on assignment/tutorials	
References/ Readings	1. Agile Software Development with Scrum, Ken Schwaber, Mike Beedle, Prentice Hall 2. Agile Estimating and Planning by Mike Cohn, Prentice Hall PTR 3. Continuous Integration: Improving Software Quality and Reducing Risk, Paul M. Duvall, Steve Matys, Andrew Glover, Addison Wesley 4. Leading Lean Software Development: Results Are not the Point Mary Poppendieck , Tom Poppendieck	
Course Outcomes	Student will be able to understand, appreciate and apply Agile practices for Software development as well as in real life	

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