Course Type	Course Code	Name of Course	L	T	P	Credit
DE	**NMCD513**	Software Testing	3	0	0	3

Course Objective

- The aim of this paper is to provide exposure to art of software testing

Learning Outcomes

- Student will get an idea about how to generate test tools and how to automate the testing strategies.

Unit No.	Topics to be Covered	Contact Hours	Learning Outcome
1	Introduction to Software Testing: Fundamentals of Verification and Testing, Review of software development models, Test Metrics, Software Testing Principles, Testing and Debugging, Software Quality, Requirement Behaviour and Correctness, Fundamentals of Test Process, The Tester's Role in a Software Development Organization	11	This unit will help students to understand fundamentals of Software Testing, concept of Software Quality, different metrics related to software testing.
2	Static Testing: Structured examination, Control flow & Data flow, Determining Metrics.	7	This unit will help students to understand about Static testing techniques of Software.
3	Dynamic Testing: Black Box Testing, Black Box Testing, Gray Box Testing, Intuitive and Experience Based Testing.	7	This unit will help students to understand about Dynamic testing techniques of Software.
4	Test Management: Test Organization, Test Planning, Test Strategies, Levels of Testing, Testing Tools Automation of Test Execution: Types of test Tools, Selection and Introduction of Test Tools.	9	This unit will help students to get the concept of Test Management: Test Organization, Test Planning, Test Strategies, Levels of Testing, Testing Tools Automation.
5	Testing Object Oriented Software: Introduction to Object Oriented testing concepts, Differences in Object Oriented testing, testing Object Oriented systems.	8	This unit will help students will learn about different methods about testing of Object Oriented Software.
Total		**42**	

Text Books:

1. G. J. Myers, C. Sandler and T. Badgett, The Art of Software Testing, John Willey & Sons, 2015

Reference Books:

1. E. Dustin, T. Garrett and B. Gauf, Implementing Automated Software Testing: How to Save Time and Lower Costs While Raising Quality, Pearson, 2009
2. L. Tamres, Introducing Software Testing, Pearson, 2002