

LESSON PLAN

SUB: SOFTWARE TESTING
BRANCH:- COMPUTER SCIENCE & ENGG.

SEMESTER: 5th

NAME OF FACULTY: SRI LAXMIDHAR SETHY (Sr. Lect. in CSE)



GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2026-27

Hod, CSE

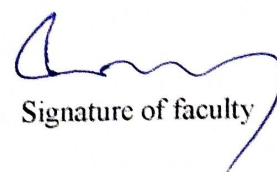
Academic Co-ordinator

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principal
Govt. Polytechnic, Bhadrak

DEPARTMENT OF COMPUTER SCIENCE & ENGG.,

	3rd	Concept of Cohesion and coupling, Classification of Cohesiveness.
9th	1st	S/W design approaches
		Structured analysis methodology
	2nd	DF diagrams, List the symbols used in DFD.
		Construction developing of DFD, Limitations of DFD.
	3rd	Structured design, Principles of transformation of DFD to Structure chart.
10th	1st	Unit-5-User interface design Characteristics of Good Interface
	2nd	Basic concepts of UID
	3rd	Types of User interfaces
11th	1st	Graphical User Interface vs. Text –based User Interface
	2nd	Video content class using NPTEL Reference
	3rd	Practice Test.
12th	1st	Code Review :Code walkthrough.
	2nd	Code inspections and software documentation.
	3rd	Testing, different types of testing, Unit testing.
13th	1st	White box testing , Methodologies for white box testing, Different white box methodologies: statement coverage, Condition coverage, branch coverage.
	2nd	White box methodologies: path coverage, cyclomatic Complexity ,data flow based testin g and mutation testing
	3rd	Debugging approaches, Debugging guidelines.
14th	1st	System testing, alpha beta and acceptance testing
	2nd	Quiz Test-II
	3rd	Unit-7:S/W Reliability S/W reliability, Importance of S/W reliability.
15th	1st	Reliability growth modeling.
	2nd	Software quality
	3rd	Software Quality Management System
		Assignment Evaluation and Discussion of Previous Year Questions.


Signature of faculty

Discipline: Computer Science & Engineering	Semester:5th,	Name of the Faculty;Sri laxmidhar Sethy(sr lect.in cse)
Subject: Software Testing(th4)	No. of Days/week:03	Email ID:ldsathy@gmail.com StartDate:01/07/2026 EndDate:05/11/2027

Week	Class Day	Theory Topics
1st	1st	Unit-1:Introduction to software engineering Program vs . Software product
	2nd	Causes for software crisis
	3rd	Computer systems Engineering.
2nd	1st	Classical waterfall.
	2nd	Iterative water fall models.
	3rd	Prototyping model.
3rd	1st	Video content class using NPTEL Reference
	2nd	Unit-2:Software Project Management Responsibility of Project Manager ,Project Planning.
	3rd	Project size estimation metrics: line of control (LOC) and
4th	1st	Project estimation techniques
	2nd	Empirical estimation techniques
	3rd	Heuristic techniques
5th	1st	COCOMO models: Basic.
	2nd	COCOMO models: Intermediate and complete.
	3rd	Scheduling.
6th	1st	Risk Management.
	2nd	Configuration Management.
	3rd	Quiz Test-I
7th	1st	Unit-3:Requirement Analysis and Specification Requirement gathering and analysis
	2nd	Software Requirements Specification: Contents of SRS
	3rd	Characteristics and organization of SRS document.
8th	1st	Smart Class using NPTEL Reference
	2nd	Unit-4: Understanding the principles and methods of S/W design. Importance of S/W design ,Design principles and concepts.