JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : BCA	**Session : 2021-2024**	**Year : IInd**	**Sem: III**
Course: Software Engineering Techniques (3C.203)			
Name of the Faculty: Anuradha Sharma	**Commencement Date: 29.8.2022**		**Date of Closure:30.12.2022**

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1	1	UNIT - I	Course Objective ,Course Outcome Introduction to Software Engineering:										
2		UNIT - I	Definition, Software Engineering Paradigms										
3		UNIT - I	waterfall method										
4		UNIT - I	prototyping, interactive enhancement										
5	2	UNIT - I	The Spiral model										
6		UNIT - I	Fourth Generation Technique Software Metrics,Role of Metrics and measurement, Metrics for software productivity and quality										
7		UNIT - I	Measurement software, size–oriented metrics, function oriented metrics										
8		UNIT - I	Metrics for software quality										
9	3	UNIT - I	Metrics for software quality										
10		UNIT - II	Integrating metrics within the software engineering process.										
11		UNIT - II	Software Requirement Specification (SRS										

12		UNIT - II	Problem analysis, structuring information										
13	4	UNIT - II	Data flow diagram and data dictionary, structured analysis										
14		UNIT - II	structured analysis										
15		UNIT - III	Characteristics and component of (SRS),										
16		UNIT - III	Metrics of SRS										
17	5	UNIT - III	Metrics of SRS										
18		UNIT - III	function point, Number of errors and found, change request frequency.										
19		UNIT - III	Planning a Software Project: Cost estimation, uncertainties in cost estimation										
20		UNIT - III	Single variable model, COCOMO model										
21	6	UNIT - III	COCOMO model, On software size estimation										
22		UNIT - III	Project scheduling and milestones, Software & Personal Planning,										
23		UNIT - III	, Rayleigh curve, Personal Plan, Quality Assurance Plan										
24		UNIT - III	Verification & Validation (V & V), inspection & review										
25	7	UNIT - III	System Design: Design Objectives, Design Principles, problem										
26		UNIT - 111	System Design: Design Objectives, Design Principles, problem										
27		UNIT - III	Abstraction, Top Down techniques										
28		UNIT - III	Bottom–up techniques										
29	8	UNIT - III	Structure Design, Structure Charts										
30		UNIT - III	Design Methodology,										
31	8	UNIT - III	Design Methodology,										

32	8	UNIT - III	Design Methodology,										
33	9	UNIT - III	Design Review										
34		UNIT - III	Automated Cross Checking, , total number of modular, number of parameters.										
35		UNIT - III	Detailed Design: Module specification, Specifying functional module										
36		UNIT - IV	specifying data abstraction, PDL and Logic/Algorithim Design										
37	10	UNIT - IV	Coding: Coding by Top–down and Bottom–up										
38		UNIT - IV	Structured Programming, Information Hiding										
39		UNIT - IV	Programming style, Internal Documentation										
40		UNIT - IV	Testing										
41	11	UNIT - IV	Level of testing, Test cases and test criteria										
42		UNIT - IV	. Psychology of Testing										
43		UNIT - IV	Functional Testing, Structural Testing										
44		UNIT - IV	Model Paper Discussion										