RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Syllabus
II Year-III Semester: B.Tech. Computer Science and Engineering
(Data Science)

3CDS4-07: Software Engineering

Credit-3
3L+0T+0P

Max. Marks : 100 (IA:30, ETE:70)
End Term Exam: 3 Hours

SN	CONTENTS	Hours
1	Introduction, software life-cycle models, software requirements specification, formal requirements specification, verification and validation.	8
2	Software Project Management: Objectives, Resources and their estimation, LOC and FP estimation, effort estimation, COCOMO estimation model, risk analysis, software project scheduling.	8
3	Requirement Analysis: Requirement analysis tasks, Analysis principles. Software prototyping and specification data dictionary, Finite State Machine (FSM) models. Structured Analysis: Data and control flow diagrams, control and process specification behavioral modeling	8
4	Software Design: Design fundamentals, Effective modular design: Data architectural and procedural design, design documentation.	8
5	Object Oriented Analysis: Object oriented Analysis Modeling, Data modeling. Object Oriented Design: OOD concepts, Class and object relationships, object modularization, Introduction to Unified Modeling Language	8
	TOTAL	**40**

Office of Dean Academic Affairs
Rajasthan Technical University, Kota

Syllabus of 2nd Year B. Tech. (CDS) for students admitted in Session 2021-22 onwards.   Page 8

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