



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
(AUTONOMOUS)
DEPARTMENT OF INFORMATION TECHNOLOGY



ACADEMIC YEAR: 2017-2018

YEAR : III

BRANCH : IT

SEM : 05

NAME OF THE SUBJECT & SUBJECT CODE : SOFTWARE ENGINEERING & U15IT514

NAME OF THE SUBJECT INCHARGE: Mrs.S.PAVITHRA, AP/IT

LESSON PLAN
UNIT I
SOFTWARE PROCESS

Session No	Topics to be covered	Time In mints	Text/Ref	Teaching Method
1.	Introduction: <ul style="list-style-type: none">➤ Some Definitions➤ FAQs about software engineering	45	A	BB
2.	The evolving role of software	45	A	BB
3.	Software characteristics	45	A	BB
4.	SW applications	45	A	BB
5.	Software Processes: <ul style="list-style-type: none">➤ Software process models	45	A	BB
6.	Waterfall model	45	A	BB
7.	The prototyping model	45	A	BB
8.	Spiral model.	45	A,B	BB
9.	RAD and Incremental model.	45	A	BB
10.	Project Management: <ul style="list-style-type: none">➤ Management activities,	45	A,B	BB
11.	Project planning, Project scheduling.	45	A	BB
12.	Risk Management.	45		

UNIT II
SOFTWARE REQUIREMENTS

Session No	Topics to be covered	Time	Text/Ref	Teaching Method
1.	Software Requirements: Functional and non functional requirements	45	A	BB

2.	User requirements.	45	A	BB
3.	System requirements.	45	A	BB
4.	The software requirements document.	45	A	BB
5.	IEEE standard of SRS.	45	A	BB,PPT
6.	Quality of good SRS.	45	A	BB
7.	Requirement Engineering Process: Feasibility study.	45	A	BB
8.	Requirements elicitation and analysis.	45	A	BB
9.	Requirements validation.	45	A	BB
10.	Requirement management.	45	A,B	BB,PPT
11.		45	A,B	BB
12.	Revision	45		

UNIT III
ANALYSIS, DESIGN CONCEPTS AND PRINCIPLES

Session No	Topics to be covered	Time	Text/Ref	Teaching Method
1.	Systems Engineering.	45	A	BB
2.	Analysis Concepts	45	A	BB
3.	Design Process And Concepts	45	A	BB
4.	Modular Design	45	A	BB
5.	Design Heuristic	45	A	BB
6.	Architectural Design	45	A	BB
7.	<ul style="list-style-type: none"> ➤ Data Design ➤ User Interface Design 	45	A	BB,PPT
8.	Real Time Software Design	45	A	BB
9.	System Design	45	A,B	BB
10.	Real Time Executives	45	A,B	BB
11.	Data Acquisition System	45	A	BB
12.	Monitoring And Control System	45		

UNIT IV
TESTING

Session No	Topics to be covered	Time	Text/Ref	Teaching Method
1.	Verification and Validation: Verification and Validation Planning.	45	A	BB
2.	S/W inspection, static analysis.	45	A	BB
3.	Software Testing: Testing functions.	45	A,B	BB
4.	Test case design.	45	A,B	BB
5.	White Box testing.	45	A	BB
6.	Black box testing.	45	A	BB
7.	Unit testing.	45	A	BB,PPT
8.	Integration Testing.	45	A	BB
9.	System testing.	45	A	BB,PPT
10.	Reliability	45	A	BB
11.		45	A	BB
12.	Revision	45		

UNIT V
MANAGING & QUALITY CONTROL

Session No	Topics to be covered	Time	Text/Ref	Teaching Method
1.	Introduction	45	A	BB
2.	Management: An Introduction	45	A	BB
3.	SW cost estimation:	45	A	BB,PPT
4.	Estimation techniques,	45	A,B	BB,PPT
5.	Algorithmic cost modeling,	45	A	BB,PPT
6.	Project duration and staffing.	45	A	BB

7.	Quality Management: Quality assurance and standards.	45	A	BB
8.	Quality planning.	45	A	BB
9.	Quality control.	45	A	BB
10.	Software Change: Program Evolution Dynamic,	45	A	BB
11.	S/W Maintenance in detail	45	A	BB
12.	Revision	45		

REFERENCES:

A	R. S. Pressman, Software Engineering: A Practitioners Approach, 5th Edn., TMA, New Delhi.
B	I. Sommerville, Software Engineering, Pearson Education Publication, 7th ed.

SUBJECT IN CHARGE

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PRINCIPAL