DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE
(AUTONOMOUS)
(Approved by AICTE & Affiliated to Anna University, Chennai)
Accredited with 'A' Grade by NAAC, Accredited by TCS
Accredited by NBA with BME, ECE & EEE
PERAMBALUR - 621 212. Tamil Nadu.
website : www.dsengg.ac.in

COURSE PLAN (2025-2026 Odd Semester)

Name of the Faculty				
Designation/Department	Assistant Professor / Information Technology			
Course Code/Name	U20IT731/ Software Project Management			
Year/Section/Department	IV/-/IT/A/C			
Credits Details	L: 3	T: 0	P: 0	C: 3
Total Contact Hours Required	45			

Syllabus:

UNIT I - BASIC CONCEPTS	**No. of Periods: 9**
Product, Process and Project – Definition – Product Life Cycle – Project Life Cycle Models.	
UNIT II - FORMAT PROCESS MODELS AND THEIR USE	**No. of Periods: 9**
Definition and Format model for a process – The ISO 9001 and CMM Models and their relevance to Project Management – Other Emerging Models like People CMM.	
UNIT III - UMBRELLA ACTIVITIES IN PROJECTS	**No. of Periods: 9**
Metrics – Configuration Management – Software Quality Assurance – Risk Analysis.	
UNIT IV - STREAM ACTIVITIES IN PROJECTS	**No. of Periods: 9**
Project Initiation – Project Planning – Execution and Tracking – Project Wind up – Concept of Process/Project Database.	
UNIT V - ENGINEERING AND PEOPLE ISSUES IN PROJECT MANAGEMENT	**No. of Periods: 9**
Phases (Requirements, Design, Development, Testing, Maintenance, Deployment) – Engineering Activities and Management Issues in Each Phase – Special Considerations in Project Management for India and Geographical Distribution Issues.	
TOTAL HOURS: 45	

Objectives:

1. Deliver successful software projects that support organization's strategic goals
2. Match organizational needs to the most effective software development model
3. Plan and manage projects at each stage of the software development life cycle (SDLC)
4. Create project plans that address real-world management challenges
5. Develop the skills for tracking and controlling software deliverables.

Text Books:

T1: Ramesh, Gopalaswamy, "Managing Global Projects", Tata McGraw Hill, 2001.
T2: Humphrey,Watts,"Managing the Software Process ",Addison Wesley,1986.

Reference Books:

R1: Pressman, Roger, "Software Engineering", A Practitioners approach". McGraw Hill, 1997.
R2: Bob Hughes and Mike Cotterell, "Software Project Management".
R3: Wheelwright and Clark, "Revolutionizing product development", The Free Press, 1993.

Web Link:

W1: https://www.tutorialspoint.com/software_engineering/software_project_management.html

Online Mode of study (if any)

- https://www.**course**ra.org
- https://www.classcentral.com
- https://www.udemy.com

Course Plan:

Topic Number	Topic	Reference Detail	Page Number	Mode of teaching	Number of Periods Required	Cumulative Period
UNIT I – BASIC CONCEPTS						
1	Product	T1	7-12	BB	2	2
2	Process and Project	T1	19-21	BB	2	4
3	Definition	T1	62-66	BB	1	5
4	Product Life Cycle	R1	105-110	PPT & Video	2	7
5	Project Life Cycle Models	T1	261-265	BB	2	9
Outcome of Unit I: • Understand the concept of Project Management. • Learn about the concept of Project life cycle.						
UNIT II - FORMAT PROCESS MODELS AND THEIR USE						
6	Definition and Format model for a process	T1	203-204	BB	2	11
7	ISO 9001	T1	206-213	BB	2	13
8	CMM Models and their relevance to Project Management	R3	119-129	BB	3	16
9	Other Emerging Models like People CMM	T1	315-316	BB	2	18

Outcome of Unit II:

- Understand the concept Format process Models.
- Able to understand ISO 9001.
- Gain the knowledge CMM Models

UNIT III - UMBRELLA ACTIVITIES IN PROJECTS						
10	Metrics	T1	351-358	BB	2	20
11	Configuration Management	T1	360-363	BB & Video	3	23
12	Software Quality Assurance	T1	364-366	BB	2	25
13	Risk Analysis	R2,W1	197-225	BB	2	27

Outcome of Unit III:

- Understand the concept of Umbrella activities.
- Gain knowledge about Configuration management.
- Understand the concept of Quality assurance and Risk Analysis.

UNIT IV - STREAM ACTIVITIES IN PROJECTS						
14	Project Initiation	T1	470-472	BB	1	28
15	Project Planning	T1	482-485	PPT & Video	2	30
16	Execution and Tracking	T1	503-510	BB	2	32
17	Project Wind up	T1	515-520	BB	2	34
18	Concept of Process/Project Database	T1,W1	526-530	BB	2	36

Outcome of Unit IV:

- Understand the concept of File Systems.
- Know about Disk Scheduling and Management.
- Get the knowledge about Directory implementation.

UNIT V - ENGINEERING AND PEOPLE ISSUES IN PROJECT MANAGEMENT						
19	Phases (Requirements, Design),	T1	741-745	BB	1	37
20	Phases (Development, Testing)	T1	746-748	BB	2	39
21	Phases (Maintenance, Deployment)	T1	749-750	BB & PPT	2	41
22	Engineering Activities and Management Issues	T2	752-753	BB	2	43

23	Special Considerations in Project Management for India and Geographical Distribution Issues.	T1	755-758	BB	2	45

Outcome of Unit V:

- Understand the concept of people issues in project management
- Learn about Engineering activities and Management issues.

Course Outcome:

At the end of course:
Students should be able to do:
CO 1. Summarize the project life cycle models. (K2)
CO 2. Describe the Format process model, ISO 9001 and CMM models. (K2)
CO 3. Evaluate the Umbrella activities in projects. (K3)
CO 4. Utilize the stream activities in process/project database. (K3)
CO 5. Make use of different phases in project management. (K3)
CO6. Solve the Engineering and people issues in project management. (K3)

Course Outcome Vs Program Outcome Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 1	2	1	-	-	2	-	-	-	-	-	-	-
CO 2	3	2	1	1	3	-	-	-	-	-	-	-
CO 3	3	2	1	1	3	-	-	-	-	-	-	-
CO 4	2	1	-	-	2	-	-	-	-	-	-	-
CO 5	2	1	-	-	2	-	-	-	-	-	-	-
CO 6	2	1	-	-	2	-	-	-	-	-	-	-
AVG:	2.33	1.33	1	1	2.33	-	-	-	-	-	-	-

Content beyond Syllabus:

- ❖ The state of practice in software management.
- ❖ The COCOMO cost estimation model.
- ❖ Various sub system process improvements.
- ❖ Core metrics like development progress, test progress, and stability.

Assignment:

Web portal	Assignment	Components	Topic Number with Topic / Unit Details	Relevance to CO
Web portal 1	--	Assessment – I (60)	Unit I and II	CO 1 & CO2
	1	Assignment Handwritten (20)	Product Life Cycle Models	CO 1
	2	Poster / PPT Presentation (20)	CMM Models	CO2
Web portal 2	--	Assessment – II (60)	Unit III and IV	CO3 & CO4
	3	Seminar (20)	Software Quality Assurance	CO3
	4	Case Study Report/ Mini Project/Model Making (20)	Project Planning	CO4
Web portal 3	--	Model Exam (75)	Unit I to V	CO1 to CO6
	5	MCQ (15)	Unit I to V	CO1 to CO6
	--	Course Attendance (10)	--	--

Submission Details:

Phase 1 (Before AT 1)	Phase 2 (Before AT 2)	Phase 3 (Before Model Exam)
Assignment 1 & 2	**Assignment 3 &4**	**Assignment 5**

PLAN OF ASSESSMENT TEST –DISTRIBUTION OF MARKS:

TEST	CO- MARK WISE DISTRIBUTION						BLOOM'S LEVEL MARK WISE DISTRIBUTION					
AT-1	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**	**CO6**	**BTL1**	**BTL2**	**BTL3**	**BTL4**	**BTL5**	**BTL6**
	30	30	-	-	-	-						
AT-2	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**	**CO6**	**BTL1**	**BTL2**	**BTL3**	**BTL4**	**BTL5**	**BTL6**
	-	-	30	30	-	-						
MODEL	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**	**CO6**	**BTL1**	**BTL2**	**BTL3**	**BTL4**	**BTL5**	**BTL6**
	20	20	20	20	10	10						

Google Classroom Code :

Google Classroom Name : U20IT731/ Software Project Management

Prepared By **Verified By**

Approved By
Principal