

K L Deemed to be University Department of Computer Science and Information Technology -- KLVZA Course Handout 2023-2024, Even Sem

| Course Title | SOFTWARE PROJECT MANAGEMENT |
|---------------------|-----------------------------|
| Course Code | :21CS3257R |
| L-T-P-S Structure | : 2-0-2-0 |
| Pre-requisite | : |
| Credits | : 3 |
| Course Coordinator | :Vignesh T |
| Team of Instructors | : |
| Teaching Associates | : |
| | |

Syllabus :Project Management context, Project Integration Management, Requirements Specification & Management, Scope Management, Time Management, Cost Management, Quality Management, Configuration Management, Human Resource Management, Communications Management, Projectdocumentation, Initiating, planning, executing & controlling projects.

Text Books :1. Schwalbe, K. (2012) Information Technology Project Management, 7th edition, ThomsonLearning. 2. Robert K. Wysocki, "Effective Software Project Management", John Wiley, 2006. 3. BobHughes and mike Cottrell "Software Project Management", McGraw-Hill Education, 2006. 4. Richard H.Thayer "Software Engineering Project Management", 2/e, Wiley-IEEE Computer Society Press, 2001.

Reference Books: 1. PMI, (2002) Project Management Body of Knowledge (The PMBOK Guide), ProjectManagement Institute. (ISBN: 1880410257) 2. W Heldman & B Heldman, (2002) IT Project+ Study Guide, Sybex. (ISBN: 0782140688) 3. Kiern Conway, "Software Project Management from Concept to Deploy", Wiley, 2000. 4. Bob Hughes, Mike Cotterell, "Software Project Management", McGraw-Hill HigherEducation, 2009. 5. Walker Royce, "Software Project Management A Unified Frame Work", 1st Edition, Pearson, 1998.

Web Links :1. https://alison.com/topic/learn/66913/learning-outcomes

 $\textbf{MOOCS:} 1. \ https://www.coursera.org/learn/it-project-management 2. \ https://www.coursera.org/learn/uvadarden-project-management$

Course Rationale: The aim of this course is to prepare students for undertaking large software project. Itintroduces the students to the high-level strategies required for managing projects from their genesis tocompletion. Every student should be able to perform a case study. They will understand the principles of Software Project Management, concepts of Project Management context, Project Integration Management, Requirements Specification & Management, Scope Management, Time Management, Cost Management, Quality Management, Configuration Management, Human Resource Management, Communications Management, Project documentation, Initiating, planning, executing & controlling projects.

Course Objectives: This course is aimed to introduce the primary concepts of project management related to manage software development projects. Usage of software techniques can produce high quality of software. Software Project Management helps us to select and initiate individual projects; project planning activities that accurately forecast project costs, timelines and quality implement processes for successful resource, communication and risk and change management. It is to provide a framework that enables themanager to make reasonable estimated of resources, cost, and schedule.

COURSE OUTCOMES (COs):

| CO NO | Course Outcome (CO) | PO/PSO | Blooms Taxonomy Level (BTL) |
|----------|---|---------------|--------------------------------------|
| CO1 | Understand the growing need for better project management, especially for information technology projects. | PSO1,PO1 | 2 |
| CO2 | Illustrate the various rules and guidelines that involved to improve the time, Cost, Quality, management aspects in software project management. | PO1,PO11,PSO1 | 2 |
| соз | Apply the guidelines that are involved to improve the configuration, Human Resource time, Communications management aspects in software project management. | PSO1,PO1,PO8 | 3 |

| CO4 | controlling projects. | PSO1,PO1,PO9 | 3 | |
|-----|--|--------------|---|--|
| CO5 | Apply and Analyze the various estimation levels of cost and effort | PSO1,PO1,PO3 | 4 | |

COURSE OUTCOME INDICATORS (COIs)::

| Outcome No. | Highest BTL | COI-1 | COI-2 | COI-3 | COI-4 |
|----------------|----------------|---|--|---|--|
| CO1 | 2 | Btl-1 Understand the growing need for better project management, especially for information technology projects. | Btl-2 Understand project phases and project life cycle, project integration management. | | |
| CO2 | 2 | Btl-1 Classify the methods for collecting and documenting requirements to meet stakeholder needs and expectations | Btl-2 Explain the processes of determining a budget and preparing a cost estimate for an information technology(IT) project. | | |
| CO3 | 3 | Btl-1 Remember why Configuration Management is crucial importance in medium to large- scale software development projects | Btl-2 Understand project human resource management and understand its processes | Btl-3 Utilize the elements of project communication planning and how to create a Communication management plan. | |
| CO4 | 3 | Btl-1 Outline the requirement of project document. | Btl-2 Explain the basic disciplines of project management, such as resource and time planning, controls, communication mechanisms, reviews and other project management tools. | Btl-3 Identify several processes and outputs of project execution and controlling | |
| CO5 4 | | Btl-1 conduct risk assessments, create risk matrices, and implement risk response plans to minimize the impact of uncertainties on project timelines, budget, and quality | Btl-2 principles of software quality assurance and testing, including creating test plans, executing test cases, and implementing continuous integration. | Btl-3 Understand and apply agile project management principles, with a focus on Scrum practices, to enhance adaptability and responsiveness to changing project requirements. | Btl-4 Able to develop Software Project Management Project |

PROGRAM OUTCOMES & PROGRAM SPECIFIC OUTCOMES (POs/PSOs)

| PO1 | Engineering Knowledge:Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. |
|------|--|
| PO2 | Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences |
| РО3 | Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations |
| PO4 | Conduct Investigations of Complex Problems:Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline. |
| PO5 | Modern Tool Usage:Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. |
| PO6 | The Engineer and Society:Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |
| PO7 | Environment and Sustainability:Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development |
| PO8 | Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice |
| PO9 | Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |
| PO10 | Communication:Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions |
| PO11 | Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. |
| PO12 | Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change. |
| PSO1 | An ability to Identify, Design, and Analyse complex computer systems, Implement and Interpret the results from those systems. |
| PSO2 | An ability to select and apply current techniques, skills, and tools necessary for computing practice and integrate IT-based solutions into the user environment effectively |

Lecture Course DELIVERY Plan:

| Sess.No. | со | COI | Торіс | Book No[CH No][Page No] | Teaching- Learning Methods | EvaluationComponents |
|----------|-----|-------|--|---|----------------------------------|---|
| 1 | CO1 | COI-1 | Explanation of course handout, Introduction | NIL | PPT,Talk | ALM,End Semester Exam,Home Assignment,SEM-EXAM1 |
| 2 | CO1 | COI-1 | Introduction to ProjectManagement,Introduction, What is aproject?, What isProject Management?,Program and Project Portfolio Management | BOOK[1],CH 1, PageNo. 1- 20Web ref:1 | PPT,Talk | End Semester Exam,HA,SEM-EXAM1 |
| 3 | CO1 | COI-1 | The Role of the Project Manager, The Project Management Profession | BOOK [1],CH 1, PageNo. 21- 33 | PPT,Talk | ALM,End Semester Exam,SEM-EXAM1 |
| 4 | CO1 | COI-1 | Project Management context, A SystemsView of Project Management, Understanding | BOOK [1],CH 2, PageNo. 43 | PPT,Talk | ALM,End Semester Exam,SEM-EXAM1 |

| Sess.No. | СО | COI | Topic | Book No[CH No][Page No] | Teaching- Learning Methods | EvaluationComponents |
|----------|-----|-------|---|---|----------------------------------|--|
| | | | Organizations,Stakeholder Management | - 46 | | |
| 5 | CO1 | COI-2 | Project Phases and the Project Life Cycle, TheContext of InformationTechnology Projects, Recent Trends Affecting Information Technology Project Management | BOOK [1], CH 2, Page No. 56 - 71, Web ref: 1 | PPT,Talk | End Semester Exam,SEM-EXAM1 |
| 6 | CO1 | COI-2 | Recent Trends Affecting Information Technology Project Management | BOOK [1],CH 4, Page No. 139 -168 | Chalk,Talk | End Semester Exam,SEM-EXAM1 |
| 7 | CO2 | COI-1 | Monitoring and Controlling Project Work, Performing Integrated Change Control | Web resources | PPT,Talk | ALM,End Semester Exam,Home Assignment,SEM-EXAM1 |
| 8 | CO2 | COI-1 | Closing Projects or Phases, Using Software to Assist in Project Integration | BOOK [1],CH 5, Page No. 187 -214 Web Ref: | PPT,Talk | End Semester Exam,HA,SEM-EXAM1 |
| 9 | CO2 | COI-1 | Scope Management, collecting Requirements, Defining Scope, Creating the Work Breakdown Structure, Validating Scope, Controlling Scope, Using Software to Assist in Project Scope Management | BOOK [1],CH 5, PageNo. 187 -214 WebRef: | PPT,Talk | Continuous Evaluation - Lab Exercise,End Semester Exam,SEM- EXAM1 |
| 10 | CO2 | COI-1 | Time Management, The Importance of Project Schedules, Planning Schedule Management, Defining Activities | BOOK [1],CH 6, Page No. 225 -229 Web Ref: 1 | PPT,Talk | End Semester Exam,Lab End Semester Exam,Lab In Semester Exam,SEM- EXAM1 |
| 11 | CO2 | COI-1 | Sequencing Activities, Estimating Activity Resources, Estimating Activity Duration, Developing the Schedule | BOOK [1],CH 6, Page No. 232 -251 Web Ref: 1 | PPT,Talk | End Semester Exam,SEM-EXAM1 |
| 12 | CO2 | COI-2 | Controlling the Schedule, Using Software to Assist in Project Time Management | BOOK [1],CH 6, Page No. 232 -251 Web Ref: 1 | PPT,Talk | ALM,End Semester Exam,SEM-EXAM1 |
| 13 | CO2 | COI-2 | Cost Management, The Importance of Project Cost Management, Basic Principles of Cost Management, Planning Cost Management | BOOK [1],CH 7, PageNo. 271 -279 | PPT,Talk | Continuous Evaluation - Lab Exercise,End Semester Exam,SEM- EXAM1 |
| 14 | CO2 | COI-2 | Estimating Costs, Determining the Budget, Controlling Costs, Using Project Management Software to Assist in Project Cost | BOOK [1],CH 7, PageNo. 280 -299 | PPT,Talk | End Semester Exam,SEM-EXAM1 |

| Sess.No. | CO | COI | Торіс | Book No[CH No][Page No] | Teaching- Learning Methods | EvaluationComponents |
|----------|-----|-------|---|--|----------------------------------|---|
| | | | Management | | | |
| 15 | CO2 | COI-2 | Quality Management, The Importance of Project Quality Management, What Is Project Quality Management | BOOK [1],CH 8, PageNo. 311 -314 | PPT,Talk | End Semester Exam,SEM-EXAM1 |
| 16 | CO2 | COI-2 | Configuration management, Administering Software Configuration Management, Configuration Management Activities | Web resources | PPT,Talk | Continuous Evaluation - Lab Exercise,End Semester Exam,SEM- EXAM1 |
| 17 | соз | COI-1 | Configuration Management Roles | Web Resources | PPT,Talk | ALM,End Semester Exam,Home Assignment,SEM-EXAM2 |
| 18 | CO3 | COI-1 | Human Resource Management, The Importance of Human Resource Management, What Is Project Human Resource Management?, Keys to Managing People, Developing the Human Resource Plan | BOOK [1],CH 9, PageNo. 359 -377 | PPT,Talk | End Semester Exam,HA,SEM-EXAM2 |
| 19 | CO3 | COI-2 | Acquiring the Project Team, Developing the Project Team | BOOK [1],CH 9, Page No. 378 -390 | PPT,Talk | ALM,End Semester Exam,Lab End Semester Exam,Lab In Semester Exam,SEM-EXAM2 |
| 20 | CO3 | COI-2 | Managing the Project Team, Using Software to Assist in Human Resource Management | BOOK [1],CH 10,Page No.405 - 408 | PPT,Talk | End Semester Exam,HA,SEM-EXAM2 |
| 21 | CO4 | COI-1 | Project documentation, Why and When is a project document required?, Is it necessary?, Steps in developing a project document | Web resources | PPT,Talk | ALM,End Semester Exam,Home Assignment,SEM-EXAM2 |
| 22 | CO4 | COI-1 | Initiating, Project Management Processes (Initiation) | Web resources | PPT,Talk | End Semester Exam,Lab End Semester Exam,Lab In Semester Exam,SEM- EXAM2 |
| 23 | CO4 | COI-2 | Project Charter and Project Management Plan Terminology, Two Processes in Project Initiation | Web resource | Chalk,Talk | ALM,End Semester Exam,SEM-EXAM2 |
| 24 | CO4 | COI-2 | Effort estimation, COCOMO, project scheduling and staffing | Web resources | PPT,Talk | ALM,End Semester Exam,HA,SEM-EXAM2 |
| 25 | CO4 | COI-3 | Executing and controlling projects, baseline, monitoring systems, important concepts during execution, change control process, cost control, Earned value analysis | Web resource | PPT,Talk | End Semester Exam,SEM-EXAM2 |

| Sess.N | o. CO | COI | Торіс | Book No[CH No][Page No] | Teaching- Learning Methods | EvaluationComponents |
|--------|-------|-------|--|----------------------------------|----------------------------------|--|
| 26 | CO4 | COI-3 | Defect injection and removal, risk management and risk assessment, risk prioritization and risk control, project tracking | WEb resource | PPT,Talk | Continuous Evaluation - Lab Exercise,End Semester Exam,SEM- EXAM2 |

Lecture Session wise Teaching - Learning Plan

SESSION NUMBER: 1

Session Outcome: 1 To understand the Course Handout

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Introduction to Software Project Management | 2 | PPT | NOT APPLICABLE |
| 20 | Application of Software Project Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 2

Session Outcome: 1 To understand Program and project Portfolio Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Introduction to ProjectManagement,Introduction, What is aproject? | 2 | PPT | NOT APPLICABLE |
| 20 | What isProject Management?,Program and Project Portfolio Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 3

 $\textbf{Session Outcome: 1} \ \textbf{To understand The Role of the Project Manager}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---------------------------------|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | The Role of the Project Manager | 2 | Talk | NOT APPLICABLE |

| 20 | The Project Management Profession | 2 | PPT | NOT APPLICABLE |
|----|-----------------------------------|---|------|-----------------------|
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 4

Session Outcome: 1 To understand Stakeholder Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Project Management context, A SystemsView of Project Management | 2 | Talk | NOT APPLICABLE |
| 20 | Understanding Organizations, Stakeholder Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 5

 $\textbf{Session Outcome: 1} \ \textbf{To understand Project Phases and the project Life Cycle}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Project Phases and the project Life Cycle, The Context of Information Technology Projects | 2 | PPT | NOT APPLICABLE |
| 20 | Recent Trends Affecting Information Technology Project Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 6

Session Outcome: 1 To understand Recent Trends Affecting Information Technology Project Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Recent Trends Affecting Information Technology Project Management | 2 | PPT | NOT APPLICABLE |
| 20 | Recent Trends Affecting Information Technology Project Management | 2 | PPT | NOT APPLICABLE |

| 5 | Discussion | 2 | Talk | NOT APPLICABLE | |
|---|------------|---|------|-------------------|--|
| | | | | | |

Session Outcome: 1 To understand Monitoring and Controlling Project Work

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Monitoring and Controlling Project Work | 2 | PPT | NOT APPLICABLE |
| 20 | Performing Integrated Change Control | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 8

 $\textbf{Session Outcome: 1} \ \textbf{To understand Closing Projects or Phases}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Closing Projects or Phases | 2 | PPT | NOT APPLICABLE |
| 20 | Using Software to Assist in Project Integration | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 9

Session Outcome: 1 To understand Scope Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Scope Management, collecting Requirements, Defining Scope, Creating the Work Breakdown Structure | 2 | PPT | NOT APPLICABLE |
| 20 | Validating Scope, Controlling Scope, Using Software to Assist in Project Scope Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 10

 $\textbf{Session Outcome: 1} \ \textbf{To understand Time Management}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Chalk | NOT APPLICABLE |
| 20 | Time Management, The Importance of Project Schedules | 2 | Talk | NOT APPLICABLE |
| 20 | Planning Schedule Management, Defining Activities | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 11

Session Outcome: 1 To understand Sequencing Activities

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Sequencing Activities, Estimating Activity Resources | 2 | PPT | NOT APPLICABLE |
| 20 | Estimating Activity Duration, Developing the Schedule | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 12

 $\textbf{Session Outcome: 1} \ \textbf{To understand Controlling the Schedule}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Controlling the Schedule | 2 | PPT | NOT APPLICABLE |
| 20 | Using Software to Assist in Project Time Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 13

 $\textbf{Session Outcome: 1} \ \textbf{To understand Cost Management}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods | |
|-----------|-------|-----|----------------------------------|-------------------------------|--|
|-----------|-------|-----|----------------------------------|-------------------------------|--|

| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
|----|--|---|------|-----------------------|
| 20 | Cost Management, The Importance of Project Cost Management | 2 | PPT | NOT APPLICABLE |
| 20 | Basic Principles of Cost Management, Planning Cost Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 14

Session Outcome: 1 To understand Estimating Costs

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Estimating Costs, Determining the Budget, Controlling Costs | 2 | PPT | NOT APPLICABLE |
| 20 | Using Project Management Software to Assist in Project Cost Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

SESSION NUMBER: 15

Session Outcome: 1 To understand Quality Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Quality Management, The Importance of Project Quality Management | 2 | PPT | NOT APPLICABLE |
| 20 | What Is Project Quality Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

SESSION NUMBER: 16

 $\textbf{Session Outcome: 1} \ \textbf{To understand Configuration management}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |

| 20 | Configuration management, Administering Software Configuration Management, | 2 | PPT | NOT APPLICABLE |
|----|--|---|-----|-----------------------|
| 25 | Configuration Management Activities | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

 $\textbf{Session Outcome: 1} \ \textbf{To understand Configuration Management Roles}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--------------------------------|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Configuration Management Roles | 2 | PPT | NOT APPLICABLE |
| 20 | Configuration Management Roles | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 18

Session Outcome: 1 To understand Human Resource Management

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | PPT | NOT APPLICABLE |
| 20 | Human Resource Management, The Importance of Human Resource Management | 2 | Talk | NOT APPLICABLE |
| 20 | What Is Project Human Resource Management?, Keys to Managing People, Developing the Human Resource Plan | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

SESSION NUMBER: 19

Session Outcome: 1 To understand Acquiring the Project Team

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|----------------------------|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Acquiring the Project Team | 2 | | NOT APPLICABLE |

| 20 | Developing the Project Team | 2 | NOT APPLICABLE |
|----|-----------------------------|---|-----------------------|
| 5 | Discussion | 2 | NOT APPLICABLE |

SESSION NUMBER: 20

 $\textbf{Session Outcome: 1} \ \textbf{To understand Managing the Project Team}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Managing the Project Team | 2 | PPT | NOT APPLICABLE |
| 20 | Using Software to Assist in Human Resource Management | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

SESSION NUMBER: 21

Session Outcome: 1 To understand Project documentation

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Project documentation, Why and When is a project document required? | 2 | PPT | NOT APPLICABLE |
| 20 | Steps in developing a project document | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 22

Session Outcome: 1 To understand Project Management Processes (Initiation)

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Initiating | 2 | PPT | NOT APPLICABLE |
| 20 | Project Management Processes (Initiation) | 2 | PPT | NOT APPLICABLE |

| 5 | Discussion | 2 | PPT | NOT APPLICABLE |
|---|------------|---|-----|-------------------|
| | | | | |

Session Outcome: 1 To understand Project Charter and Project Management Plan Terminology

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Project Charter and Project Management Plan Terminology | 2 | PPT | NOT APPLICABLE |
| 20 | Two Processes in Project Initiation | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

SESSION NUMBER: 24

Session Outcome: 1 To understand Effort estimation

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---------------------------------|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Effort estimation, COCOMO | 2 | PPT | NOT APPLICABLE |
| 20 | project scheduling and staffing | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 25

Session Outcome: 1 To understand Executing and controlling projects

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|--|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Executing and controlling projects, baseline, monitoring systems | 2 | PPT | NOT APPLICABLE |
| 20 | important concepts during execution, change control process, cost control, Earned value analysis | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 26

Session Outcome: 1 To understand Defect injection and removal

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|---|-----|----------------------------------|-------------------------------|
| 5 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Defect injection and removal, risk management and risk assessment | 2 | PPT | NOT APPLICABLE |
| 20 | risk prioritization and risk control, project tracking | 2 | PPT | NOT APPLICABLE |
| 5 | Discussion | 2 | PPT | NOT APPLICABLE |

Tutorial Course DELIVERY Plan: NO Delivery Plan Exists

Tutorial Session wise Teaching - Learning Plan

No Session Plans Exists

Practical Course DELIVERY Plan:

| Tutorial Session no | Topics | CO-Mapping |
|---------------------------|---|------------|
| 1 | Utilize GIT BASH and deploy the files to GIT HUB | CO5 |
| 2 | Apply PULL and PUSH mechanism using GIT | CO5 |
| 3 | Make use of GIT and deploy the files to Bitbucket | CO5 |
| 4 | Identify the latest PUSH changes in the bit bucket using DIFF | CO5 |
| 5 | Build User stories for an individual personas for Hospital Management System | CO5 |
| 6 | Build User stories for an individual personas for Library Management System | CO5 |
| 7 | Build product backlogs for an application in JIRA | CO5 |
| 8 | Develop a sprint plan review on any of the above systems (JIRA) | CO5 |
| 9 | Build a dashboard consists of (To do, doing, done) process using Kanban boards | CO5 |
| 10 | Build User stories for an individual personas for SCRUM Roles (Scrum Master, Product Owner, Scrum Team) (Documentation) | CO5 |
| 11 | Develop an automated deadline for the process to be done in an organization adopted agile methodology | CO5 |
| 12 | Build performance charts using Atlasian Boards (JIRA or any available SCRUM boards) | CO5 |

Practical Session wise Teaching - Learning Plan

SESSION NUMBER: 1

Session Outcome: 1 To understand Utilize GIT BASH and deploy the files to GIT HUB

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 2

Session Outcome: 1 To understand Apply PULL and PUSH mechanism using GIT

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 3

Session Outcome: 1 To understand Make use of GIT and deploy the files to Bitbucket

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 4

Session Outcome: 1 To understand Identify the latest PUSH changes in the bit bucket using DIFF

| Time(min) Topic | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------------|-----|----------------------------------|-------------------------------|
|-----------------|-----|----------------------------------|-------------------------------|

| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
|----|------------------------|---|------|-----------------------|
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | PPT | NOT APPLICABLE |

 $\textbf{Session Outcome: 1} \ \ \textbf{To understand Build User stories for an individual personas for Hospital Management System}$

| Time(min) | Торіс | | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|---|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 6

 $\textbf{Session Outcome: 1} \ \textbf{To understand Build User stories for an individual personas for Library Management System}$

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 7

Session Outcome: 1 To understand Build product backlogs for an application in JIRA

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |

| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
|----|------------------------|---|------|-----------------------|
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

Session Outcome: 1 To understand Develop a sprint plan review on any of the above systems (JIRA)

| Time(min) | Торіс | | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|---|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 9

Session Outcome: 1 To understand Build a dashboard consists of (To do, doing, done) process using Kanban boards

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tool | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 1 | Talk | NOT APPLICABLE |

SESSION NUMBER: 10

Session Outcome: 1 To understand Build User stories for an individual personas for SCRUM Roles (Scrum Master, Product Owner, Scrum Team) (Documentation)

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |

| 45 | Experiment using Tools | 2 | NOT APPLICABLE |
|----|------------------------|---|-----------------------|
| 25 | Result Discussion | 2 | NOT APPLICABLE |

 $\textbf{Session Outcome: 1} \ \ \textbf{To understand Develop an automated deadline for the process to be done in an organization adopted agile methodology}$

| Time(min) | Торіс | | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|---|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tools | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

SESSION NUMBER: 12

Session Outcome: 1 To understandBuild performance charts using Atlasian Boards (JIRA or any available SCRUM boards)

| Time(min) | Торіс | BTL | Teaching- Learning Methods | Active Learning Methods |
|-----------|------------------------|-----|----------------------------------|-------------------------------|
| 10 | Attendance | 2 | Talk | NOT APPLICABLE |
| 20 | Experiment Explanation | 2 | PPT | NOT APPLICABLE |
| 45 | Experiment using Tools | 2 | PPT | NOT APPLICABLE |
| 25 | Result Discussion | 2 | Talk | NOT APPLICABLE |

Skilling Course DELIVERY Plan: NO Delivery Plan Exists

Skilling Session wise Teaching - Learning Plan

No Session Plans Exists

WEEKLY HOMEWORK ASSIGNMENTS/ PROBLEM SETS/OPEN ENDEDED PROBLEM-SOLVING EXERCISES etc:

| Week | Assignment Type | Assignment No | Торіс | Details | co |
|------|-----------------------------------|------------------|-------|---|-----|
| 12 | Weekly Homework Assignments | 4 | | Implementing ISO 9000 Quality Management System for a software firm | CO4 |

| 3 | Weekly Homework Assignments | 1 | Software Metrics | A Study on Software Metrics and Phase based Defect Removal Pattern Technique for Project Management | CO1 |
|---|-----------------------------------|---|----------------------------|---|-----|
| 7 | Weekly Homework Assignments | 2 | 3 Sigmama Principle | Utilization of Statistical Process Control in Defined Level Software Companies to Manage Processes Using Control Charts with Three Sigma | CO2 |
| 9 | Weekly Homework Assignments | 3 | Process Measurement System | How To Create A Process Measurement System for a particular software firm | соз |

COURSE TIME TABLE:

| | Hour | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|-----------|---|---|---|---|---|---|---|---|---|
| Day | Component | | | | | | | | | |
| | Theory | | | | | V-S31,V-S32 | V-S31,V-S32 | | | |
| | Tutorial | | | | | | | | | |
| Mon | Lab | | | | | V-S33,V-S33,V- S33,V-S34,V- S34,V-S34 | V-S33,V-S33,V- S33,V-S34,V- S34,V-S34 | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | V-S33,V-S34 | V-S33,V-S34 | | | | | |
| | Tutorial | | | | | | | | | |
| Tue | Lab | | | V-S31,V-S31,V- S31,V-S32,V- S32,V-S32 | V-S31,V-S31,V- S31,V-S32,V- S32,V-S32 | | | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | | | | | | | |
| Wed | Tutorial | | | | | | | | | |
| weu | Lab | | | | | | | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | | | | | | | |
| Thu | Tutorial | | | | | | | | | |
| IIIu | Lab | | | | | | | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | | | | | | | |
| Fri | Tutorial | | | | | | | | | |
| 111 | Lab | | | | | | | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | | | | | | | |
| Sat | Tutorial | | | | | | | | | |
| Jai | Lab | | | | | | | | | |
| | Skilling | | | | | | | | | |
| | Theory | | | | | | | | | |
| Sun | Tutorial | | | | | | | | | |
| Jun | Lab | | | | | | | | | |
| | Skilling | | | | | | | | | |

REMEDIAL CLASSES:

Supplement course handout, which may perhaps include special lectures and discussions that would be planned, and schedule notified according $\frac{1}{2}$

SELF-LEARNING:

Assignments to promote self-learning, survey of contents from multiple sources.

DELIVERY DETAILS OF CONTENT BEYOND SYLLABUS:

Content beyond syllabus covered (if any) should be delivered to all students that would be planned, and schedule notified accordingly.

| S.no Advanced Topics, Additional Reading, Research papers and any | co | ALM | References/MOOCS |
|---|----|-----|------------------|
|---|----|-----|------------------|

EVALUATION PLAN:

| Evaluation Type | Evaluation Component | Weightage/M | Iarks | Assessment Dates | Duration (Hours) | CO1 | CO2 | соз | CO4 | CO5 |
|-------------------------|--------------------------------|--------------|-------|---------------------|---------------------|------|----------|------|------|-----|
| End | End Semester | Weightage | 24 | | 180 | 6 | 6 | 6 | 6 | |
| Semester Summative | Exam | Max Marks | 100 | | 100 | 25 | 25 | 25 | 25 | |
| Evaluation | Lab End | Weightage | 16 | | 120 | | | | | 16 |
| Total= 40 % | Semester Exam | Max Marks | 50 | | 120 | | | | | 50 |
| | Semester in | Weightage | 15 | | 90 | 7.5 | 7.5 | | | |
| In | Exam-I | Max Marks | 50 | | 90 | 25 | 25 | | | |
| Semester Summative | Semester in | Weightage | 15 | | 90 | | | 7.5 | 7.5 | |
| Evaluation | Exam-II | Max Marks | 50 | | 30 | | | 25 | 25 | |
| | Lab In Semester Exam | Weightage | 8 | | 120 | | | | | 8 |
| | | Max Marks | 50 | | 120 | | | | | 50 |
| | ALM | Weightage | 8 | | 90 | 2 | 2 | 2 | 2 | |
| In | ALM | Max Marks | 40 | | 30 | 10 | 10 10 10 | | | |
| Semester | Home Assignment and | Weightage | 7 | | 90 | 1.75 | 1.75 | 1.75 | 1.75 | |
| Formative Evaluation | Textbook | Max Marks 40 | 30 | 10 | 10 | 10 | 10 | | | |
| Total= 22 % | Continuous Evaluation - Lab | Weightage | 7 | | 120 | | | | | 7 |
| | Exercise | Max Marks | 120 | | 120 | | | | | 120 |

ATTENDANCE POLICY:

Every student is expected to be responsible for regularity of his/her attendance in class rooms and laboratories, to appear in scheduled tests and examinations and fulfill all other tasks assigned to him/her in every course

In every course, student has to maintain a minimum of 85% attendance to be eligible for appearing in Semester end examination of the course, for cases of medical issues and other unavoidable circumstances the students will be condoned if their attendance is between 75% to 85% in every course, subjected to submission of medical certificates, medical case file and other needful documental proof to the concerned departments

DETENTION POLICY:

In any course, a student has to maintain a minimum of 85% attendance and In-Semester Examinations to be eligible for appearing to the Semester End Examination, failing to fulfill these conditions will deem such student to have been detained in that course.

PLAGIARISM POLICY:

Supplement course handout, which may perhaps include special lectures and discussions

COURSE TEAM MEMBERS, CHAMBER CONSULTATION HOURS AND CHAMBER VENUE DETAILS:

Supplement course handout, which may perhaps include special lectures and discussions

| Name of D | Delivery Sections | Chamber | Chamber | Chamber | Signature |
|-----------|-------------------|---------|---------|---------|-----------|
|-----------|-------------------|---------|---------|---------|-----------|

| Faculty | Component of Faculty | of Faculty | Consultation Day (s) | Consultation Timings for each day | Consultation Room No: | of Course faculty: | |
|-------------------------------|----------------------|---------------|-------------------------|---|--------------------------|-----------------------|--|
| Vudatha Chandra Prakash | L | 31-MA | - | - | - | - | |
| Vudatha Chandra Prakash | P | 31-A | - | - | - | - | |
| Nagamalleswari Dubba | P | 33-В | - | - | - | - | |
| Radha Mothukuri | P | 34-B | - | - | - | - | |
| Abdul A | L | 32-MA | - | - | - | - | |
| Abdul A | P | 32-A | - | - | - | - | |
| CH Sabitha | P | 31-B | - | - | - | - | |
| Vignesh T | L | 33-MA | - | - | - | - | |
| Vignesh T | P | 33-A | - | - | - | - | |
| Thamodharan Arumugam | L | 34-MA | - | - | - | - | |
| Thamodharan Arumugam | P | 34-A | - | - | - | - | |
| Prasanthi Valluri | P | 32-C | - | - | - | - | |
| nuthakki praveena | P | 34-C | - | - | - | - | |
| Natha Deepthi | P | 32-B | - | - | - | - | |
| Thella Priyanka | P | 31-C | - | - | - | - | |
| Anjaneyulu Gurram | P | 33-C | - | - | - | - | |

GENERAL INSTRUCTIONS

Students should come prepared for classes and carry the text book(s) or material(s) as prescribed by the Course Faculty to the class.

NOTICES

Most of the notices are available on the LMS platform.

All notices will be communicated through the institution email.

All notices concerning the course will be displayed on the respective Notice Boards.

Signature of COURSE COORDINATOR

(Vignesh T)

Signature of Department Prof. Incharge Academics & Vetting Team Member

Department Of CS&IT

HEAD OF DEPARTMENT:

Approval from: DEAN-ACADEMICS

(Sign with Office Seal) [object HTMLDivElement]