**LESSON PLAN**

**Faculty Name : Mr.TAMILSELVAN**

**Designation : Asst Professor /IT**

**Subject Name & : CS1021– Software Project Management**

**Code**

**Year : Final Year (2009-2013) / VII**

**Degree & Branch : B.Tech-IT**

**Aim:**

To enable the students to understand about software project management process involved in the field of Information Technology.

**Objectives**:

 Major points

* To study Fundamental software project management
* To understand the Software management process framework
* To understand the iterative process planning
* To understand the software metrics

**Text Book:**

1. Walker Royce, “Software Project Management - A Unified Framework”,

Pearson Education, 2004.

2. Humphrey Watts, “Managing the Software Process”, Addison Wesley, 1989.

**References :**

1. Humphrey Watts, “Managing the Software Process”, Addison Wesley, 1989.

2. Ramesh Gopalaswamy, “Managing Global Projects”, Tata McGraw Hill, 2001.

3. Bob Hughes and Mikecotterell, “Software Project Management”, 3rd Edition,

Tata McGraw Hill, 2004.

**CS1021** – **SOFTWARE PROJECT MANAGEMENT L T P C 3 0 0 3**

**UNIT I FUNDAMENTALS 9**

Conventional software management − Evolution of software economics − Improving

software economics − Conventional versus modern software project management.

**UNIT II SOFTWARE MANAGEMENT PROCESS FRAMEWORK 9**

Lifecycle phases − Artifacts of the process − Model based software architectures −

Workflows of the process − Checkpoints of the process.

**UNIT III SOFTWARE MANAGEMENT DISCIPLINES 9**

Iterative process planning − Organisation and responsibilities − Process automation −

Process control and process instrumentation − Tailoring the process.

**UNIT IV MANAGED AND OPTIMIZED PROCESS 9**

Data gathering and analysis **−** Principles of data gathering **−** Data gathering process **−**

Software measures **−** Data analysis **−** Managing software quality **−** Defect prevention.

**UNIT V CASE STUDIES 9**

COCOMO cost estimation model **−** Change metrics **−** CCPDS-R.

**Total: 45**

**TEXT BOOKS**

1. Walker Royce, “Software Project Management - A Unified Framework”,

Pearson Education, 2004.

2. Humphrey Watts, “Managing the Software Process”, Addison Wesley, 1989.

**REFERENCES**

1. Humphrey Watts, “Managing the Software Process”, Addison Wesley, 1989.

2. Ramesh Gopalaswamy, “Managing Global Projects”, Tata McGraw Hill, 2001.

3. Bob Hughes and Mikecotterell, “Software Project Management”, 3rd Edition,

Tata McGraw Hill, 2004.

**UNIT I FUNDAMENTALS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | DATE | Name of the Topic | Textbook/ References | No. of Hours | Cumulative Hours |
| 1 | 2-7-12 | Waterfall model,  | T1 |  |  |
| 2 | 3-7-12 | Conventional s/w management | T1 |  |  |
| 3 | 5-7-12 | s/w economics | T1 |  |  |
| 4 | 6-7-12 | Pragmatic s/w cost estimation | T1 |  |  |
| 5 | 9-7-12 | Reducing product size | T1 |  |  |
| 6 | 11-7-12 | Improving s/w process | T1 |  |  |
| 7 | 13-7-12 | Improving s/w Effectiveness | T1 |  |  |
| 8 | 17-7-12 | Conventional s/w engg | T1 |  |  |
| Total no. of hours : 12Completed in \_\_\_\_\_\_ Hours  | Test Date: |

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 **(End of Unit)**

**UNIT II SOFTWARE MANAGEMENT PROCESS FRAMEWORK**

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| --- | --- | --- | --- | --- | --- |
| S.No | DATE | Name of the Topic | Textbook/ References | No. of Hours | Cumulative Hours |
| 9 | 18-7-12 |  Life Cycle phase | T1 |  |  |
| 10 | 19-7-12 | Engineering and production stage | T1 |  |  |
| 11 | 20-7-12 | Inception phase , Elaboration phase,  | T1 |  |  |
| 12 | 23-7-12 | Artifact sets | T1 |  |  |
| 13 | 24-7-12 | Artifact evolution over the life cycle | T1 |  |  |
| 14 | 25-7-12 | Model based s/w architecture | T1 |  |  |
| 15 | 26-7-12 | Workflow of the process | T1 |  |  |
| 16 | 27-7-12 | Checkpoints of the process | T1 |  |  |
| 17 | 28-7-12 | Management artifact | T1 |  |  |
| 18 | 30-7-12 | Engineering artifact | T1 |  |  |
| 19 | 31-7-12 | All phase overview | T1 |  |  |
| Total no. of hours : 12Completed in \_\_\_\_\_\_ Hours  | 1-8-12 |

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 **(End of Unit)**

**UNIT III SOFTWARE MANAGEMENT DISCIPLINES**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | DATE | Name of the Topic | Textbook/ References | No. of Hours | Cumulative Hours |
| 20 | 1-8-12 | Iterative process planning | T1 |  |  |
| 21 | 3-8-12 | WBS structure | T1 |  |  |
| 22 | 7-8-12 | Cost and schedule estimation of the process | T1 |  |  |
| 23 | 9-8-12 | Line of business organization | T1 |  |  |
| 24 | 10-8-12 | Process automation | T1 |  |  |
| 25 | 11-8-12 | Roundtrip Engg  | T1 |  |  |
| 26 | 13-8-12 | Management Indicators | T1 |  |  |
| 27 | 14-8-12 | Quality indicators | T1 |  |  |
| 28 | 16-8-12 | Tailoring process | T1 |  |  |
| 29 | 17-8-12 |  |  |  |  |
| Total no. of hours : 12Completed in \_\_\_\_\_\_ Hours  | Test Date: |

HOD

 **(End of Unit)**

**UNIT IV MANAGED AND OPTIMIZED PROCESS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | DATE | Name of the Topic | Textbook/ References | No. of Hours | Cumulative Hours |
| 30 | 27-8-12 | Data gathering analysis | T1 |  |  |
| 31 | 28-8-12 | Principles of data gathering | T1 |  |  |
| 32 | 29-8-12 | Data gathering | T1 |  |  |
| 33 | 30-8-12 | Data Gathering process | T1 |  |  |
| 34 | 1-9-12 | Software measures | T1 |  |  |
| 35 | 4-9-12 | Data analysis | T1 |  |  |
| 36 | 6-9-12 | Managing s/w quality | T1 |  |  |
| 37 | 7-9-12 | Defect Prevention | T1 |  |  |
|  |  |  |  |  |  |
| Total no. of hours : 13Completed in \_\_\_\_\_\_ Hours  | Test Date: |

HOD

 **(End of Unit)**

**UNIT V CASE STUDIES**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | DATE | Name of the Topic | Textbook/ Reference | No. of Hours | Cumulative Hours |
| 38 | 10-9-12 | State of the practice in s/w mgt | T1 |  |  |
| 39 | 12-9-12 | COCOMO model | T1 |  |  |
| 40 | 14-9-12 | Cost estimation model | T1 |  |  |
| 41 | 15-9-12 | COCOMO  | T1 |  |  |
| 42 | 17-9-12 | Ada COCOMO | T1 |  |  |
| 43 | 18-9-12 | Change metrics | T1 |  |  |
| 44 | 20-9-12 | CCPDS | T1 |  |  |
| 45 | 22-9-12 | COCOMO cost estimation model | T1 |  |  |
| Total no. of hours : 12Completed in \_\_\_\_\_\_ Hours  | Test Date: |

HOD

(End of Semester)

Staff Signature HOD Principal