

# DEPARTMENT OF MANAGEMENT STUDIES NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI - 620 015, TAMIL NADU, INDIA

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|   | COURSE PLAN                   | – PART I               |                          |
|---|-------------------------------|------------------------|--------------------------|
| Course Title                                      | SOFTWARE PROJECT MANAGEMENT   |                        |                          |
| Course Code                                       | MB 806                        | No. of Credits         | 2                        |
| Course Code of Pre-requisite subject(s)           | NIL                           |                        |                          |
| Session   | July '22 – Oct '22            | Section                |                          |
| Name of Faculty                                   | Dr. P.Sridevi                 | Department             | MBA                      |
| Email   | psridevi@nitt.edu             | Telephone No.          | 041-2503711              |
| Name of Course<br>Coordinator(s) (if, applicable) | NIL                           |                        |                          |
| Course Type                                       | Core course V Elective course |                        |                          |
|   |                               |                        |                          |
| SYLLABUS  |                               |                        |                          |
| Unit I SPM concepts                               |                               |                        |                          |
| Definition – components of SPM                    | I – challenges and on         | portunities – tools ar | nd techniques – managing |

Definition – components of SPM – challenges and opportunities – tools and techniques – managing human resource and technical resource – costing and pricing of projects – training and development – project management techniques.

# **Unit II Software Measurements**

Monitoring & measurement of SW development – cost, size and time metrics – methods and tools for metrics – issues of metrics in multiple projects.

# **Unit III Software Quality**

Quality in SW development – quality assurance – quality standards and certifications – the process and issues in obtaining certifications – the benefits and implications for the organization and its customers – change management.

#### **Unit IV Risk Issues**

The risk issues in SW development and implementation – identification of risks – resolving and avoiding risks – tools and methods for identifying risk management.

# **Unit V Offshore Projects**

Multiple projects – off-shore development issues – managing human resources – pricing and payments across countries – remote development and implementation.

# **COURSE OBJECTIVES**

To create an understanding on Process, methodologies, tools, techniques, metrics, quality and risk issues in software project management

| COURSE OUTCOMES (CO)  |                                    |  |  |
|---|------------------------------------|--|--|
| Course Outcomes   | Aligned Programme<br>Outcomes (PO) |  |  |
| To understand the process, methods and Measurements involved in Software project management   | 1, 3                               |  |  |
| 2. To understand the scenario of software industry in softwar development process   | 1, 2, 4                            |  |  |
| 3. To provide hands-on experience on s/w project planning Scheduling, progress assessment and cost estimation supporting tools to manage software projects (MS-Project, MTA-PROIT COCOMO, UX and so on) | g                                  |  |  |

|        | COURSE TEACHING AND LEARNING ACTIVITIES  |   |   |  |  |
|--------|--|---|---|--|--|
| Sl.No. | Week   | Topic   | Mode of Delivery  |  |  |
| 1.     | 3 <sup>rd</sup> week of July 2022<br>Class – 1 <sup>st</sup> week<br>(3 Contact Hours) | Definition – components of SPM – challenges and opportunities –––   | Lecture - Power Point<br>Presentation   |  |  |
| 2.     | Class- 2 <sup>nd</sup> week<br>(3 Contact Hours)                                       | Tools and techniques, project management techniques.  | Lecture - Power Point<br>Presentation   |  |  |
| 3.     | Class- 3 <sup>rd</sup> week<br>(3 Contact Hours)                                       | Managing human resource and technical resource – costing and pricing of projects – training and development               | Lecture - Power Point<br>Presentation   |  |  |
| 4.     | Class- 4 <sup>th</sup> week<br>(3Contact Hours)  | Monitoring & measurement of SW development – cost, size and time metrics (* Assessment -1)                                | Lecture - Power Point<br>Presentation   |  |  |
| 5.     | Class- 5 <sup>th</sup> week<br>(3 Contact Hours)                                       | Methods and tools for metrics – issues of metrics in multiple projects. (* Assessment- 2)                                 | Lecture - Power Point<br>Presentation   |  |  |
| 6.     | Class- 6 <sup>th</sup> week<br>(3 Contact Hours)                                       | Quality in SW development – quality assurance (* Assessment -3)   | Group analysis and presentation Demo on system development tool.                    |  |  |
| 7.     | 7 <sup>th</sup> week   | Cycle Test for IV Trimester / MBA scheduled   | _   |  |  |
| 8.     | Saturday & Sunday  | Industry oriented seesion   | Guest Lecture From Industry (Any weekend of trimester based on expert availability) |  |  |
| 9.     | Class- 8 <sup>th</sup> week (3 Contact Hours)  | Quality standards and certifications – the process and issues in obtaining certifications                                 | Lecture - Power Point<br>Presentation   |  |  |
| 10.    | Class – 9 <sup>th</sup> week (3 Contact Hours)   | The benefits and implications for the organization and its customers – change management.  (* Assessment -4 deliberation) | Lecture - Power Point<br>Presentation   |  |  |
| 11.    | Class - 10 <sup>th</sup> week (3 Contact Hours)  | The risk issues in SW development and implementation – identification of risks –  | Lecture - Power Point<br>Presentation   |  |  |

| 12. | Class – 11 <sup>th</sup> week<br>(3 Contact Hours) | Resolving and avoiding risks – tools and methods for identifying risk management.  | Lecture - Power Point Presentation Role Play on SPM Concept                           |
|-----|--|--|---|
| 13. | Class – 12 <sup>th</sup> week<br>(3 Contact Hours) | Multiple projects – off-shore development issues – managing human resources – pricing and payments across countries – remote development and implementation. | Lecture - Power Point Presentation  ** Evaluation out off contact hours if required** |
| 14. | October 2022                                       | Trimester Exam Begins (* Assessment -5)  |   |

#### COURSE ASSESSMENT METHODS

| Sl. | Mode of Assessment  | Week / Date                  | Remarks  | % Weightage |
|-----|---|------------------------------|--|-------------|
| No. |   |                              |  |             |
| 1.  | Assessment–1(Project planning for an application development) | 4 <sup>th</sup> week -2022   | Class room evaluation –<br>Individual assessment | 15%         |
| 2.  | Assessment -2 (Classroom activity with tools)                 | 5th week –2022               | Classroom assessment                             | 10%         |
| 3.  | Assessment -3(Case presentation)                              | 6 <sup>th</sup> week - 2022  | Classroom assessment                             | 10%         |
| 4.  | Assessment -4 (Individual Assignment)                         | 12th week - 2022             | Report submission                                | 15%         |
| 5.  | Assessment -5 (written assessment)                            | 13 <sup>th</sup> week - 2022 | End Trimester<br>180 minutes                     | 50%         |

#### Note:

- 1. Attending all the assessments (Assessment 1 to 5) is MANDATORY for every student.
- 2. Every student is expected to score minimum 40% to pass the course. Otherwise the student would be declared fail and 'F' grade will be awarded.

### **COURSE EXIT SURVEY**

- Feedbacks are collected before final examination through MIS or any other standard format followed by the institute
- Students, through their Class Representatives, may give their feedback at any time to the course faculty which will be duly addressed.

The students may also give their feedback during Class Committee Meeting.

# ATTENDANCE:

- Minimum 75% is mandatory to write the trimester examination. Students having attendance 65% to 74% are eligible for the end semester exam only after attending the extra classes and submitting assignments. Students have to redo the course, if they have less than 65% of attendance.
- Medical Certificate / On Duty Certificate should be submitted immediately after rejoining.

# **COMPENSATION ASSESSMENT:**

- Only one compensation assessment will be given for Assessments for the students those who are absent for any genuine reason for classroom assessment.
- The prior permission and required document must be submitted for absence.

# ACADEMIC HONESTY & PLAGIARISM:

- Avoid usage of electronic devices at classes, test and exam.

- The students are expected to come out with their original solution for the problems given in the assignment. If found to copy, marks will be reduced.
- Need to maintain honesty & discipline in class room and exam hall

#### ADDITIONAL INFORMATION

- The students can get their doubts clarified at any time with their faculty member with prior appointment.
- Guest lecture date will be intimated based on expert availability
- Submission of all assessment should be on the date informed. No late submission is allowed.

FOR APPROVAL

Dr. P.SRIDEVI

**Course Faculty** 

Chairman (Class Committee)

Dr.G.Muruganantham

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