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|  |  | **PVP20** |
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|  | **Software Project Management(SPM)** |  |
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| **Offering Branches:** | CSE, IT | **Course code:** | **20CS3401** |
| **Course Category:** | Program Elective-IV | **Credits:** | 3 |
| **Course Type** | Theory | **Lecture-Tutorial- Practical:** | 3-0-0 |
| **Prerequisites:** | Software Engineering | **Continuous Evaluation:** | 30 |
| **Semester End Evaluation:** | 70 |
| **Total Marks:** | 100 |
| **Course Outcomes** |
| Upon successful completion of the course, the student will be able to: |
| **CO1** | Understand the fundamentals of Project Management principles while developing software. | **L2** |
| **CO2** | Apply a suitable software process model to develop a project. | **L3** |
| **CO3** | Apply the effort Estimation techniques to prepare accurate project estimation | **L3** |
| **CO4** | Analyze and interpret the functionalities of operating system | **L4** |
| **Mico - Syllabus Contents** |
| **UNIT-1** | **Introduction to Software Project Management (1.1,1.2,1.3,1.4,1.5,1.6,1.7,1.8,1.9,1.10,1.11,1.12,1.13,1.14,1.15)**Introduction, Why is software project management Important, what is project, S/W vs other types of project, Contract management and Technical project management, Activities covered by software project management, Plans methods and methodologies , some ways of categorizing projects, stake holders, setting objectives, the business case, Project success and Failure, What is management, management control, Traditional versus modern project management practices.  | **CO1** |
| **UNIT-2** | **Project Evaluation and Programme Management** **(2.1,2.2,2.3,2.4,2.5,2.9,2.10,2.11,2.12,2.13)**Introduction, A Business case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Strategic Programme Management, Creating a Programme, Aids to programme management, some reservations about programme management, Benefits Management | **CO1,CO2,CO4** |
| **UNIT-3** | **Selection of an Appropriate Project Approach** **(4.1,4.2,4.3,4.4,4.7,4.8,4.9)**Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, The Waterfall Model, The Spiral Model, Software Prototyping. | **CO1,CO2,CO4** |
| **UNIT-4** | **Software Effort Estimation** **(5.1,5.3,5.4,5.12)**Introduction, Problems with Over and Under-Estimates, The Basis for Software Estimating, COSMIC Full Function Points,.  | **CO1,CO3,CO4** |
| **UNIT-5** | **Risk Management****(7.1,7.2,7.3,7.5,7.6,7.7,7.8)** Introduction, Risk, Categories of Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management.  | **CO1,CO2,CO4** |
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| **Learning Resources** |
| **Text books:** |
| 1 |  Software Project Management, Bob Hughes, Mike Cotterell and Rajib Mall, Fifth Edition, Tata McGraw Hill, New Delhi, 2012.  |
| **References:** |
| 1 | Software Project Management in Practice‖, Pankaj Jalote, 2002, Pearson, Education Asia.  |
| 2 | Information Technology Project Management‖, Jack T Marchewka, Third Edition (International Student Version) , Wiley India |
| 3 | Project Management- Core Textbook‖, Samuel J mantel et‗al., First India Edition, Wiley India. |
| **e-Resources and other Digital Material:** |
| 1 | https://nptel.ac.in/courses/106105218  |
| 2 | https://www.digimat.in/nptel/courses/video/106105218/L01.html  |