Subject Code : P8ITE11

ELECTIVE COURSE III -5- SOFTWARE ENGINEERING

Objective: *To teach students about systematic software development methods with emphasis on people, process and product interrelationship. Here various prescriptions that seems to help produce quality software, is taught to the student.*

UNIT-I

Scope of Software engineering – Life-cycle models – The Software Process – Agile Development.

UNIT-II

Practicing Software engineering – System Engineering – Requirements Engineering – Analysis and Design modeling – Architecture level considerations.

UNIT-III

Project management – People, Product, Process view- Metrics for process & project – Estimation – Project Scheduling, Risk management.

UNIT-IV

Testing strategies - Testing tactics - Product metrics.

UNIT-V

Quality management - Change management – Reengineering.

TEXT BOOK:

1. **Pressman, Roger S.,** Software engineering, A practitioner's approach, Sixth edition, McGrawHill International edition, 2005 (ISBN 007-124083-7) **[Unit-1 : (**Chapters 1, 2, 3, 4); **Unit-2** : (Chapters 5, 6, 7, 8); **Unit-3 (**Chapters 21, 22, 23, 24, 25); **Unit-4 (**Chapters 13, 14, 15); **Unit-5 (**Chapters 26, 27, 31)]

REFERENCE BOOK:

1. **Schach, Stephen,** Software engineering, Seventh edition, Tata Mc Graw Hill edition., 2007.
2. **Pfleeger**, Software Engineering, Prentice Hall, 1999