| Subject | Fund. of Programming in C | Course Code | IT111 | Theoretical | 4 hrs / wk |
|----------|---------------------------|--------------------|-------|-------------|------------|
| Semester | 1 | Prerequisite | None | Practical | 0 hrs / wk |

| | Program Learning Components | | | | |
|-------------|---|--|--|--|--|
| | 1. Programming and Problems Analysis: | | | | |
| Week 1-2 | Problems solving using computer. Steps of problems solving. Software. Definition Of Software. Types of software. Software development stages. Data types. Variables. Constants. Reserved words. | | | | |
| Week 3-5 | 2. Statements: Assign statements. Decision statements. Input /output statements. Control statement. Loops. Math Operations. Relational Operations. Logical Operations. String Operations. | | | | |
| | 3. Flowchart: | | | | |
| Week 6-8 | The definition of flowcharts. The characteristics of flowcharts. Figures and shapes used in flowcharts: process box, choose box, input, output box. Algorithms: problem solving using algorithm multiplication or sorting list. Samples of solved mathematical problems like matrix | | | | |

| | multiplication or sorting list of names. | | |
|---------------|---|--|--|
| Week 9-10 | 4. Types Of Flowchart: | | |
| | Sequential Flowchart. Brainchild Flowchart. Looping Flowchart. TDMA Of FDMA. | | |
| Week 11-12 | 5. Looping And Control: | | |
| | Using of mathematical and logical operation in looping and decision the production of output by executing flowchart. | | |

Course Assessment:

| Course Work | Mid-Term Tests | Final Examination |
|-------------|----------------|-------------------|
| 10 | 30 | 60 |

NOTE: Course Work may include assignments, projects and practical activities.