

SYMBIOSIS INSTITUTE OF TECHNOLOGYM.TECH. (CS)PROGRAMME STRUCTURE 2012-2014

|    |                                      |  |
|----|--------------------------------------|--|
| 1  | Objectives                           | <ol style="list-style-type: none"> <li>1. To generate competent manpower in the emerging areas Computer Science Engineering Technology.</li> <li>2. To inculcate among the students an aptitude for engineering and research for the furthering of knowledge in the chosen field.</li> </ol> |
| 2  | Duration                             | 2 years  |
| 3  | Proposed Intake                      | 18   |
| 4  | Reservation of Seats                 | I. Within the sanctioned intake<br>SC-15%<br>ST-7.5%<br>Differently abled-3%   |
| 5  | Eligibility                          | B.TechCSE, IT  |
| 6  | Selection Procedure                  | GATE score or entrance test for non-GATE   |
| 7  | Medium of Instruction                | English  |
| 8  | Pattern of Programme                 | Semester: Master level with lectures, tutorials, practicals followed by dissertation/thesis in the final semester.   |
| 9  | Subjects & Specialization            | List of the courses attached   |
| 10 | Fee Structure                        | Rs. 1,30,000   |
| 11 | Examination and Method of Assessment | Internal tests, assignments, presentation and external exams both theory and practical.  |
| 12 | Standard of Passing                  | As per grading system of the university. The thesis/dissertation should be approved.   |

|    |                 |   |
|----|-----------------|---|
| 13 | Award of Degree | On successful completion of all the internal and external components with a minimum overall CGPA of 2.0 |
|----|-----------------|---|

| Semester I  |   |                   |                 |   |     |                          |     |     |     |              |             |
|-------------|---|-------------------|-----------------|---|-----|--------------------------|-----|-----|-----|--------------|-------------|
| Course Code | Subject                                       | Nature of Subject | Teaching Scheme |   |     | Examination Scheme Marks |     |     |     | Total Credit | Total Marks |
|             |   |                   | L               | T | Lab | Practical                |     | CA  | ESE |              |             |
|             |   |                   |                 |   |     | Int                      | Ext |     |     |              |             |
| 070144101   | Applied Algorithms                            | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144102   | Advanced Computing                            | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144103   | Advanced Numerical Methods in Engineering     | ES                | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144104   | Network Computing                             | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144105   | Advanced databases                            | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144106   | Applied Algorithms Lab                        | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144107   | Advanced Computing Lab                        | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144108   | Advanced Numerical Methods in Engineering Lab | ES                | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144109   | Network Computing Lab                         | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144110   | Advanced databases Lab                        | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
|             |   | Total             | 20              | 0 | 10  | 100                      | 150 | 400 | 600 | 25           | 1250        |

| Semester II |   |                   |                 |   |     |                          |     |     |     |              |             |
|-------------|---|-------------------|-----------------|---|-----|--------------------------|-----|-----|-----|--------------|-------------|
| Course Code | Subject                                       | Nature of Subject | Teaching Scheme |   |     | Examination Scheme Marks |     |     |     | Total Credit | Total Marks |
|             |   |                   | L               | T | Lab | Practical                |     | CA  | ESE |              |             |
|             |   |                   |                 |   |     | Int                      | Ext |     |     |              |             |
| 070144201   | Web Technologies and SOA                      | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144202   | Research Methodology                          | PD                | 2               | 2 | 0   | 0                        | 0   | 60  | 90  | 3            | 150         |
| 070144203   | Information systems: Tools and techniques     | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144204   | Software Product Line Management              | C                 | 4               | 0 | 0   | 0                        | 0   | 80  | 120 | 4            | 200         |
| 070144205   | Intelligent Systems                           | C                 | 3               | 0 | 0   | 0                        | 0   | 60  | 90  | 3            | 150         |
| 070144206   | Software Testing and Quality Assurance        | C                 | 3               | 0 | 0   | 0                        | 0   | 60  | 90  | 3            | 150         |
| 070144207   | Web Technologies and SOA Lab                  | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144208   | Information systems: Tools and techniques Lab | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144209   | Intelligent Systems Lab                       | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
| 070144210   | Software Testing and Quality Assurance        | C                 | 0               | 0 | 2   | 20                       | 30  | 0   | 0   | 1            | 50          |
|             |   | Total             | 20              | 2 | 8   | 80                       | 120 | 420 | 630 | 25           | 1250        |

| Semester III                               |  |                   |                 |   |     |                          |     |     |              |             |
|--|--|-------------------|-----------------|---|-----|--------------------------|-----|-----|--------------|-------------|
| Course code                                | Subject                                | Nature of Subject | Teaching Scheme |   |     | Examination Scheme Marks |     |     | Total Credit | Total Marks |
|  |  |                   | L               | T | Lab | TW                       | CA  | ESE |              |             |
| 070144301                                  | Project-1                              | PD                | 0               | 0 | 0   | 0                        | 270 | 180 | 9            | 450         |
| 070144302                                  | Seminar-I                              | PD                | 0               | 0 | 0   | 0                        | 240 | 160 | 8            | 400         |
| Elective I -Select any one from 303to305   |  |                   |                 |   |     |                          |     |     |              |             |
| 070144303                                  | Enterprise Resource Planning           | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| 070144304                                  | Human Computer Interface               | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| 070144305                                  | Advanced Multimedia Techniques         | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| Elective II -Select any one from 306 to308 |  |                   |                 |   |     |                          |     |     |              |             |
| 070144306                                  | Network Security                       | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| 070144307                                  | Data Mining                            | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| 070144308                                  | Design patterns                        | C                 | 4               | 0 | 0   | 0                        | 80  | 120 | 4            | 200         |
| 070144309                                  | Integrated Disaster Management Program |                   |                 |   | 0   | 0                        | 150 | 0   | 3*           | 150         |
|  |  | Total             | 8               | 0 | 0   | 0                        | 820 | 580 | 25+3         | 1400        |
| *Internal Credits (Over and above)         |  |                   |                 |   |     |                          |     |     |              |             |

| Semester IV |         |                   |                 |   |     |                          |     |     |              |             |
|-------------|---------|-------------------|-----------------|---|-----|--------------------------|-----|-----|--------------|-------------|
| Course code | Subject | Nature of Subject | Teaching Scheme |   |     | Examination Scheme Marks |     |     | Total Credit | Total Marks |
|             |         |                   | L               | T | Lab | TW                       | CA  | ESE |              |             |
| 070144401   | Thesis  | PD                | 0               | 0 | 0   | 0                        | 750 | 500 | 25           | 1250        |
|             |         | Total             | 0               | 0 | 0   | 0                        | 750 | 500 | 25           | 1250        |

## Summary

| Semester     | Internal Credits | External Credits | Total Credits | Total Marks |
|--------------|------------------|------------------|---------------|-------------|
| Semester I   | 0                | 25               | 25            | 1250        |
| Semester II  | 0                | 25               | 25            | 1250        |
| Semester III | 3(IDMP)          | 25               | 25+3          | 1250+150    |
| Semester IV  | 0                | 25               | 25            | 1250        |
| Total        | 3                | 100              | 100+3         | 5000+150    |

C - Core Subject

ES - Engineering Science Subject

GP - General Proficiency Subject

TW-Term Work (Practical)

ID - Inter Disciplinary Subject

PD - Professional Development Subject

L- Lecture, T-Tutorial, HA-Home Assignment

CA-Continuous Assessment, ESE- End Semester Examination