

## Course Structure for ME (Computer Engineering)

| Subject Code   | Subject                        | Teaching Scheme Hrs/Week |           | Examination Scheme     |                         |           |                    | Credits    |           |
|----------------|--------------------------------|--------------------------|-----------|------------------------|-------------------------|-----------|--------------------|------------|-----------|
|                |                                | Lect.                    | Pract     | Paper                  |                         | Tw        | Oral/Presentation  |            | Marks     |
|                |                                |                          |           | In Semester Assessment | End Semester Assessment |           |                    |            |           |
| <b>SEM — I</b> |                                |                          |           |                        |                         |           |                    |            |           |
| 510101         | Applied Algorithms             | 04                       | —         | 50                     | 50                      | —         | —                  | 100        | 4         |
| 510102         | High Performance Databases     | 04                       | —         | 50                     | 50                      | —         | —                  | 100        | 4         |
| 510103         | Advanced Computer Architecture | 04                       | —         | 50                     | 50                      | —         | —                  | 100        | 4         |
| 510104         | Research Methodology           | 04                       | —         | 50                     | 50                      | —         | —                  | 100        | 4         |
| 510105         | Elective –I                    | 05                       | —         | 50                     | 50#                     | —         | —                  | 100        | 5         |
| 510106         | Laboratory Practice-I          | —                        | 04        | —                      | —                       | 50        | 50                 | 100        | 4         |
|                |                                |                          |           |                        |                         |           |                    |            |           |
|                | <b>Total</b>                   | <b>21</b>                | <b>04</b> | <b>250</b>             | <b>250</b>              | <b>50</b> | <b>50</b>          | <b>600</b> | <b>25</b> |
| Subject Code   | Subject                        | Teaching Scheme Hrs/Week |           | Examination Scheme     |                         |           |                    | Credits    |           |
|                |                                | Lect.                    | Pract     | Paper                  |                         | Tw        | Oral/Pre-sentation |            | Marks     |
|                |                                |                          |           | In Semester Assessment | End Semester Assessment |           |                    |            |           |
| <b>SEM— II</b> |                                |                          |           |                        |                         |           |                    |            |           |
| 510107         | Operating System Design        | 04                       | —         | 50                     | 50                      | —         | —                  | 100        | 4         |



|                |                         |   |           | <b>In Semester Assessment</b> | <b>End Semester Assessment</b> |            |            |            |           |
|----------------|-------------------------|---|-----------|-------------------------------|--------------------------------|------------|------------|------------|-----------|
| <b>SEM— IV</b> |                         |   |           |                               |                                |            |            |            |           |
| <b>610106</b>  | Seminar –III            | — | 05        | —                             | —                              | 50         | 50         | 100        | <b>5</b>  |
| <b>610107</b>  | Dissertation Stage – II | — | 20        | —                             | —                              | 150        | 50         | 200        | <b>20</b> |
|                | <b>Total</b>            |   | <b>25</b> | —                             | —                              | <b>200</b> | <b>100</b> | <b>300</b> | <b>25</b> |

**#: End semester assessment is done Internally in the respective college. All electives have Open Elective option that can be Inter/intra disciplinary. The elective can have three modules having credits (2+2+1) = 5. Colleges can offer electives independently with Industry-Institute Interaction and can perform assessment and produce certificate.**

**Electives:**

| <b>Elective I</b> |   | <b>Elective II</b> |  |
|-------------------|---|--------------------|--|
| <b>510105A</b>    | <b>Intelligent Systems</b>              | <b>510110A</b>     | <b>Business Intelligence and Data Mining</b> |
| <b>510105B</b>    | <b>IR and Web Mining</b>                | <b>510110B</b>     | <b>Usability Engineering</b>                 |
| <b>510105C</b>    | <b>Machine Learning and Translation</b> | <b>510110C</b>     | <b>Advanced Compiler Design</b>              |
| <b>510105D</b>    | <b>Open Elective /Real Time Systems</b> | <b>510110D</b>     | <b>Open Elective/ Embedded System Design</b> |

| <b>Elective III</b> |  |
|---------------------|--|
| <b>610103A</b>      | <b>Network Security</b>                        |
| <b>610103B</b>      | <b>Cloud Computing</b>                         |
| <b>610103C</b>      | <b>Computer Vision and Pattern Recognition</b> |
| <b>610103D</b>      | <b>Open Elective/ Soft Computing</b>           |

The dissertation must result into the publication of at least two research papers (at Stage-I and Stage-II respectively) preferably in the Journal having Citation Index 2.0 and ISSN number; or reputed International Journal recommended by the guide of the Dissertation and the BoS supported cPGCON event certificate of paper presentation and participation. The guides certificate covering originality of the work and plagiarism-testing result shall be included in the report along with the Published Journal Papers and. cPGCON certificates. The comments received by the journal paper reviewers be attached in the Dissertation report and shall be made available during dissertation presentation/viva-voce to the examiners.