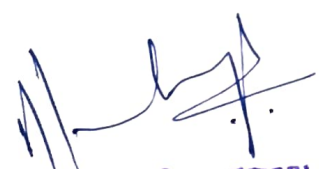


## B. E. - Computer Science and Engineering

| CSE Semester - III             |             |                                              |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------|----------------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code | Course Title                                 | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |             |                                              | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |             |                                              |                       |   |       |                      |                       |     |         |
| 1                              | 3BS305HS    | Probability & Statistics                     | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |
| 2                              | 3ES301EC    | Switching Theory and Logic Design            | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 3PC301CS    | Database Management Systems                  | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 3PC302CS    | Discrete Mathematics                         | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | 3PC303CS    | Computer Organization and Microprocessor     | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 6                              | 3MC302HS    | Essence of Indian Traditional Knowledge      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 0       |
| Practical / Laboratory Courses |             |                                              |                       |   |       |                      |                       |     |         |
| 7                              | 3PC351CS    | Database Management Systems Lab              | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 3PC352CS    | Computer Organization and Microprocessor Lab | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 9                              | 3PC353CS    | Python Programming Lab                       | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 10                             | 3PW354CS    | Skill Development Course-I                   | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |             | Total Credits                                |                       |   |       | 29                   | 400                   | 600 | 21      |

  
**Head of the Department**  
**Department of CSE**  
**Methodist College of Engg & Tech**  
**Abids, Hyderabad.**

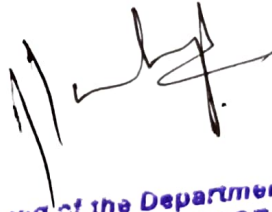
| CSE Semester - IV              |             |                                           |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------|-------------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code | Course Title                              | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |             |                                           | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |             |                                           |                       |   |       |                      |                       |     |         |
| 1                              | 3HS404HS    | Optimization & Problem Solving Techniques | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 2                              | 3PC404CS    | Data Mining                               | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |
| 3                              | 3PC405CS    | Operating Systems                         | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 3PC406CS    | Computer Networks                         | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | 3HS403HS    | Human Values Professional Ethics          | 2                     | 0 | 0     | 2                    | 40                    | 60  | 2       |
| Practical / Laboratory Courses |             |                                           |                       |   |       |                      |                       |     |         |
| 6                              | 3PC455CS    | Operating Systems Lab                     | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 7                              | 3PC456CS    | Computer Networks Lab                     | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 3PC457CS    | Java Programming Lab                      | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 9                              | 3PW458CS    | Skill Development Course- II              | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |             | Total Credits                             |                       |   |       | 25                   | 360                   | 540 | 20      |

  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg. & Tech  
 Abids, Hyderabad.

**B. E. - Computer Science and Engineering**

**CSE Semester - V**

| B. E. - Computer Science and Engineering |                   |                               |                       |   |       |                      |                       |     |         |    |
|------------------------------------------|-------------------|-------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|----|
| CSE Semester - V                         |                   |                               |                       |   |       |                      |                       |     |         |    |
| S. No.                                   | Course Code       | Course Title                  | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |    |
|                                          |                   |                               | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |    |
| Theory Courses                           |                   |                               |                       |   |       |                      |                       |     |         |    |
| 1                                        | 3PC507CS          | Artificial Intelligence       | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |    |
| 2                                        | 3ES501CS          | Digital Image Processing      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |    |
| 3                                        | 3PC508CS          | Software Engineering          | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |    |
| 4                                        | 3PE5(01 TO 05 )CS | Professional Elective – I     | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |    |
| 5                                        | OE                | Open Elective – I             | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |    |
| 6                                        | 3MC503HS          | Indian Constitution           | 3                     | 0 | 0     | 3                    | 40                    | 60  | 0       |    |
| Practical / Laboratory Courses           |                   |                               |                       |   |       |                      |                       |     |         |    |
| 7                                        | 3PC559CS          | Artificial Intelligence Lab   | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |    |
| 8                                        | 3ES551CS          | Digital Image Processing Lab  | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |    |
| 9                                        | 3PW560CS          | Skill Development Course– III | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |    |
| 10                                       | 3HS553HS          | Soft Skills Lab - I           | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |    |
|                                          |                   | Total Credits                 |                       |   |       |                      | 27                    | 400 | 600     | 20 |

  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg & Tech  
 Abids, Hyderabad.

**Professional Elective - I**

|   |          |                                     |
|---|----------|-------------------------------------|
| 1 | 3PE501CS | Information Security                |
| 2 | 3PE502CS | Information Retrieval Systems       |
| 3 | 3PE503CS | Agile Methodologies                 |
| 4 | 3PE504CS | Principles of Programming Languages |
| 5 | 3PE505CS | DevOps                              |

**Professional Elective - II**

|   |          |                             |
|---|----------|-----------------------------|
| 1 | 3PE606CS | Digital Forensics           |
| 2 | 3PE607CS | Big Data Analytics          |
| 3 | 3PE608CS | Software Project Management |
| 4 | 3PE609CS | Scripting Languages         |
| 5 | 3PE610CS | Natural Language Processing |

  
Head of the Department  
Department of CSE  
Methodist College of Engg & Tech  
Abids, Hyderabad.



| CSE Semester – VI              |                   |                                         |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------------|-----------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code       | Course Title                            | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |                   |                                         | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |                   |                                         |                       |   |       |                      |                       |     |         |
| 1                              | 3PC609CS          | Design and Analysis of Algorithms       | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 2                              | 3PC610CS          | Machine Learning                        | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 3PC611CS          | Automata Languages and Compiler Design  | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 3PE6(06 TO 10) CS | Professional Elective – II              | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | OE                | Open Elective – II                      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 6                              | 3HS602HS          | Effective Technical Communication(ETCE) | 2                     | 0 | 0     | 2                    | 40                    | 60  | 2       |
| Practical / Laboratory Courses |                   |                                         |                       |   |       |                      |                       |     |         |
| 7                              | 3PC661CS          | Machine Learning Lab                    | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 3PC662CS          | Web Technology Lab                      | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 9                              | 3PW663CS          | Mini Project                            | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |                   | Total Credits                           |                       |   |       | 25                   | 360                   | 540 | 21      |

### Professional Elective – II

|   |          |                             |
|---|----------|-----------------------------|
| 1 | 3PE606CS | Digital Forensics           |
| 2 | 3PE607CS | Big Data Analytics          |
| 3 | 3PE608CS | Software Project Management |
| 4 | 3PE609CS | Scripting Languages         |
| 5 | 3PE610CS | Natural Language Processing |

### Open Elective – II

|          |                             |            |
|----------|-----------------------------|------------|
| 3OP60XXX | Open Elective - II          | Offered by |
| 1        | Green Building Technologies | CIVIL      |
| 2        | Software Engineering        | CSE        |
| 3        | Deep Learning               | AI&DS      |
| 4        | Electric Vehicle Technology | EEE        |
| 5        | Fundamentals of IOT         | ECE        |
| 6        | 3D Printing                 | MECH       |

Head of the Department  
**Department of CSE**  
 Methodist College of Engg & Tech  
 Abids, Hyderabad

## SCHEME OF INSTRUCTION &amp; EXAMINATION

## BE (COMPUTER SCIENCE AND ENGINEERING) SEMESTER – VII

| S. No.                        | Course Code | Course Title               | Scheme of Instruction |    |     |                | Scheme of Examination |     |                 | Credits |
|-------------------------------|-------------|----------------------------|-----------------------|----|-----|----------------|-----------------------|-----|-----------------|---------|
|                               |             |                            | L                     | T  | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Courses                |             |                            |                       |    |     |                |                       |     |                 |         |
| 1                             | PC 701 CS   | Distributed Systems        | 3                     | 1  | -   | 4              | 30                    | 70  | 3               | 3       |
| 2                             | PE 73X CS   | Professional Elective –III | 3                     | -  | -   | 3              | 30                    | 70  | 3               | 3       |
| 3                             | PE 74X CS   | Professional Elective –IV  | 3                     | -  | -   | 3              | 30                    | 70  | 3               | 3       |
| 4                             | OE-II       | Open Elective –II          | 3                     | -  | -   | 3              | 30                    | 70  | 3               | 3       |
| Practical/ Laboratory Courses |             |                            |                       |    |     |                |                       |     |                 |         |
| 5                             | PC 751 CS   | Distributed Systems Lab    | -                     | -  | 2   | 2              | 25                    | 50  | 3               | 1       |
| 6                             | PC 752 CS   | Web Technologies Lab       | -                     | -  | 4   | 4              | 25                    | 50  | 3               | 2       |
| 7                             | PW 751 CS   | Project Work – I           | -                     | -  | 6   | 6              | 50                    | -   | -               | 3       |
| 8                             | SI 752 CS   | Summer Internship          | -                     | -  | -   | -              | 50                    | -   | -               | 2       |
| Total                         |             |                            | 12                    | 01 | 12  | 25             | 270                   | 380 |                 | 20      |

| Professional Elective – III |                              | Professional Elective – IV |                                |
|-----------------------------|------------------------------|----------------------------|--------------------------------|
| Course Code                 | Course Title                 | Course Code                | Course Title                   |
| PE 731 CS                   | Computational Complexity     | PE 741 CS                  | Queuing Theory and Modeling    |
| PE 732 CS                   | Advanced Operating Systems   | PE 742 CS                  | Computational Number Theory    |
| PE 733 CS                   | Multimedia Technologies      | PE 743 CS                  | Internet of Things (IOT)       |
| PE 734 CS                   | Software Reuse Techniques    | PE 744 CS                  | Augmented and Virtual Reality  |
| PE 735 CS                   | Information Retrieval System | PE 745 CS                  | Software Quality and Assurance |
| PE 736 CS                   | Big data analytics           | PE 746 CS                  | Deep Learning                  |
|                             |                              |                            | Information Security           |

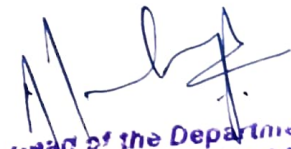
| Open Elective - II |                             |
|--------------------|-----------------------------|
| Course Code        | Course Title                |
| OE 701 CS          | Web Application Development |
| OE 702 CS          | Principles of Python        |

  
 Head of the Department  
 Department of CSE  
 Methodist College - Engg & Tech  
 Abids, Hyderabad.

**CSE-Semester -VIII**

| S.No.                         | Course Code | Course Title             | Scheme of Instruction |     |                |     | Scheme of Examination |                 |   | Credits |
|-------------------------------|-------------|--------------------------|-----------------------|-----|----------------|-----|-----------------------|-----------------|---|---------|
|                               |             |                          | LT                    | P/D | Contact Hrs/Wk | CIE | SEE                   | Duration in Hrs |   |         |
| Theory Courses                |             |                          |                       |     |                |     |                       |                 |   |         |
| 1                             | PE 85X CS   | Professional Elective -V | 3                     | -   | -              | 3   | 30                    | 70              | 3 | 3       |
| 2                             | OE-III      | Open Elective – III      | 3                     | -   | -              | 3   | 30                    | 70              | 3 | 3       |
| Practical/ Laboratory Courses |             |                          |                       |     |                |     |                       |                 |   |         |
| 3                             | PW861 CS    | Project Work – II        | -                     | -   | 16             | 16  | 50                    | 100             | 3 | 8       |
| Total                         |             |                          | 06                    | -   | 16             | 16  | 110                   | 240             | - | 14      |

| Professional Elective –V |                               | Open Elective - III |                      |
|--------------------------|-------------------------------|---------------------|----------------------|
| Course Code              | Course Title                  | Course Code         | Course Title         |
| PE 851 CS                | Information Theory and Coding | OE 801 CS           | Software Engineering |
| PE 852 CS                | Internet of Things            | OE 802 CS           | Neural Networks      |
| PE 853 CS                | Robotics                      |                     |                      |
| PE 854 CS                | Secure Software Engineering   |                     |                      |
| PE 855 CS                | Natural Language Processing   |                     |                      |
| PE 856 CS                | Intellectual Property Rights  |                     |                      |

  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg & Tech  
 Abids, Hyderabad.

**Scheme of Instruction & Examination**  
**B. E. - Artificial Intelligence and Data Science**  
**AI&DS Semester - III**

| S. No.                         | Course Code | Course Title                                 | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|--------------------------------|-------------|----------------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
|                                |             |                                              | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |             |                                              |                       |   |       |                      |                       |     |         |
| 1                              | 1BS305HS    | Probability and Statistics                   | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |
| 2                              | 1PC301AD    | Discrete Mathematics                         | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 1PC302AD    | Database Management Systems                  | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 1PC303AD    | Computer Organization and Microprocessor     | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | 1ES303EC    | Switching Theory and Logic Design            | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 6                              | 1MC302HS    | Essence of Indian Traditional Knowledge      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 0       |
| Practical / Laboratory Courses |             |                                              |                       |   |       |                      |                       |     |         |
| 7                              | 1PC351AD    | Database Management Systems Lab              | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 1PC352AD    | Python Programming Lab                       | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 9                              | 1PC353AD    | Computer Organization and Microprocessor Lab | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 10                             | 1PW354AD    | Skill Development Course- I                  | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |             | Total Credits                                |                       |   |       | 29                   | 400                   | 600 | 21      |

  
**Head of the Department**  
**Department of CSE**  
**Methodist College of Engg & Tech**  
**Abids, Hyderabad.**

| AI&DS Semester - IV            |             |                                                      |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------|------------------------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code | Course Title                                         | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |             |                                                      | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory -Courses                |             |                                                      |                       |   |       |                      |                       |     |         |
| 1                              | 1PC404AD    | Operating Systems                                    | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 2                              | 1PC405AD    | Statistical Analytics and Computing                  | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 1PC406AD    | Foundations of Artificial Intelligence               | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |
| 4                              | 1PC407AD    | Software Engineering                                 | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | 1HS403HS    | Human Values and Professional Ethics                 | 3                     | 0 | 0     | 3                    | 40                    | 60  | 2       |
| Practical / Laboratory Courses |             |                                                      |                       |   |       |                      |                       |     |         |
| 6                              | 1PC455AD    | Operating Systems Lab                                | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 7                              | 1PC456AD    | Java Programming Lab                                 | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 8                              | 1PC457AD    | Statistical Analytics and Computing using Python Lab | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 9                              | 1PW458AD    | Skill Development Course - II                        | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |             | Total Credits                                        |                       |   |       | 26                   | 360                   | 540 | 20      |

  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg & Tech  
 Abids, Hyderabad.



**Scheme of Instruction & Examination**  
**B. E. – Artificial Intelligence and Data Science**

**AI&DS Semester - V**

| AI&DS Semester - V             |                   |                                   |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------------|-----------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code       | Course Title                      | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |                   |                                   | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |                   |                                   |                       |   |       |                      |                       |     |         |
| 1                              | 1PC508AD          | Design and Analysis of Algorithms | 3                     | 1 | 0     | 4                    | 40                    | 60  | 4       |
| 2                              | 1PC509AD          | Data Science                      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 1ES501CS          | Digital Image Processing          | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 1PE5(01 to 05) AD | Professional Elective – I         | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | OE                | Open Elective – I                 | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 6                              | 1MC503HS          | Indian Constitution               | 3                     | 0 | 0     | 3                    | 40                    | 60  | 0       |
| Practical / Laboratory Courses |                   |                                   |                       |   |       |                      |                       |     |         |
| 7                              | 1PC559AD          | Data Science Lab                  | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 1ES551CS          | Digital Image Processing Lab      | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 9                              | 1HS553HS          | Soft Skills Lab-I                 | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 10                             | 1PW560AD          | Skill DevelopmentCourse - III     | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
|                                |                   | Total Credits                     |                       |   |       | 25                   | 400                   | 600 | 20      |

**Professional Elective – I**

|   |          |                                      |
|---|----------|--------------------------------------|
| 1 | 1PE501AD | Mobile Computing                     |
| 2 | 1PE502AD | Data Mining                          |
| 3 | 1PE503AD | Software requirements and Estimation |
| 4 | 1PE504AD | Principles of Programming Languages  |
| 5 | 1PE505AD | Advanced Databases                   |

**Open Elective – I**

| 1OE50XXX | Open Elective - I                  | Offered by |
|----------|------------------------------------|------------|
| 1        | Disaster Mitigation                | CIVIL      |
| 2        | Oops using JAVA                    | CSE        |
| 3        | Artificial Intelligence            | AI&DS      |
| 4        | Renewable Energy Systems           | EEE        |
| 5        | Basics of Electronic Communication | ECE        |
| 6        | Energy Science and Engineering     | MECH       |

*[Signature]*  
Head of the Department  
Department of CSE  
Methodist College of Engg & Tech  
Abida, Hyderabad



| AI&DS Semester - VI            |                   |                                        |                       |   |       |                      |                       |     |         |
|--------------------------------|-------------------|----------------------------------------|-----------------------|---|-------|----------------------|-----------------------|-----|---------|
| S. No.                         | Course Code       | Course Title                           | Scheme of Instruction |   |       |                      | Scheme of Examination |     | Credits |
|                                |                   |                                        | L                     | T | P / D | Contact Hours / week | CIE                   | SEE |         |
| Theory Courses                 |                   |                                        |                       |   |       |                      |                       |     |         |
| 1                              | 1PC610AD          | Computer Networks                      | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 2                              | 1PC611AD          | Machine Learning                       | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 3                              | 1PC612AD          | Automata Languages and Compiler Design | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 4                              | 1PE6(06 to 10) AD | Professional Elective – II             | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 5                              | OE                | Open Elective – II                     | 3                     | 0 | 0     | 3                    | 40                    | 60  | 3       |
| 6                              | 1HS652HS          | Effective Technical Communication      | 2                     | 0 | 0     | 2                    | 40                    | 60  | 2       |
| Practical / Laboratory Courses |                   |                                        |                       |   |       |                      |                       |     |         |
| 7                              | 1PC661AD          | Machine Learning Lab                   | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| 8                              | 1PC662AD          | Data Visualization Lab                 | 0                     | 0 | 2*2   | 4                    | 40                    | 60  | 2       |
| 9                              | 1PW663AD          | MiniProject                            | 0                     | 0 | 2     | 2                    | 40                    | 60  | 1       |
| Total Credits                  |                   |                                        |                       |   |       | 26                   | 360                   | 540 | 21      |

### Professional Elective – II

|   |          |                               |
|---|----------|-------------------------------|
| 1 | 1PE606AD | Digital Forensics             |
| 2 | 1PE607AD | Information Retrieval Systems |
| 3 | 1PE608AD | Software Project Management   |
| 4 | 1PE609AD | Web Technology                |
| 5 | 1PE610AD | Distributed Databases         |

### Open Elective – II

| 1OE60XXX | Open Elective - II          | Offered by |
|----------|-----------------------------|------------|
| 1        | Green Building Technologies | CIVIL      |
| 2        | Software Engineering        | CSE        |
| 3        | Deep Learning               | AI&DS      |
| 4        | Electric Vehicle Technology | EEE        |
| 5        | Fundamentals of IOT         | ECE        |
| 6        | 3D Printing                 | MECH       |

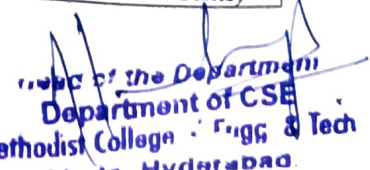
  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg. & Tech  
 Abids, Hyderabad.

SCHEME OF INSTRUCTION & EXAMINATION  
B.E. VII – SEMESTER  
(Artificial Intelligence and Data Science)

| S.No                        | Course Code | Course Title                   | Scheme of Instruction |   |     |                | Scheme of Examination |     |             | Credits |
|-----------------------------|-------------|--------------------------------|-----------------------|---|-----|----------------|-----------------------|-----|-------------|---------|
|                             |             |                                | L                     | T | D/P | Contact Hrs/Wk | CIE                   | SEE | Duration In |         |
| Theory Course               |             |                                |                       |   |     |                |                       |     |             |         |
| 1.                          | PC701AD     | Deep Learning                  | 3                     | 1 | -   | 4              | 30                    | 70  | 3           | 4       |
| 2.                          | PC702AD     | Mining of Massive DataSets     | 3                     |   | -   | 3              | 30                    | 70  | 3           | 3       |
| 3.                          | PC703AD     | Software Project Management    | 3                     | - | -   | 3              | 30                    | 70  | 3           | 3       |
| 4.                          | PE-IV       | Professional Elective-IV       | 3                     | - | -   | 3              | 30                    | 70  | 3           | 3       |
| 5.                          | OE-II       | Open Elective II               | 3                     | - | -   | 3              | 30                    | 70  | 3           | 3       |
| Practical/Laboratory Course |             |                                |                       |   |     |                |                       |     |             |         |
| 6                           | PC751AD     | Deep Learning Lab              | -                     | - | 3   | 3              | 25                    | 50  | 3           | 1.5     |
| 7                           | PC752AD     | Mining of Massive DataSets Lab | -                     | - | 3   | 3              | 25                    | 50  | 3           | 1.5     |
| 8                           | PW761AD     | Project Work (Phase-I)         | -                     | - | 6   | 6              | 50                    |     |             | 3       |
| 9.                          | SI671AD     | Summer Internship              |                       |   |     |                | 50                    |     |             | 2       |
| Total                       |             |                                | 15                    | 1 | 12  | 28             | 275                   | 450 | 21          | 24      |

| Professional Elective-IV |                             |
|--------------------------|-----------------------------|
| CourseCode               | Course Title                |
| PE741AD                  | No SQL                      |
| PE742AD                  | Natural Language Processing |
| PE743AD                  | Mobile Computing            |
| PE744AD                  | Semantic Web                |
| PE745AD                  | Introduction to Drones      |

| Sl.No | Code    | Name of Subject                                          |
|-------|---------|----------------------------------------------------------|
| 1     | OE701AS | Data Mining (Not for CSE,IT ,AI&ML,IOT,AI & DS Students) |

  
 Head of the Department  
 Department of CSE  
 Methodist College - Engg & Tech  
 Abids, Hyderabad

**B.E. VIII – SEMESTER**  
(Artificial Intelligence and Data Science)

| S.No                        | Course Code | Course Title            | Scheme of Instruction |   |     |                | Scheme of Examination |     |                    | Credits |
|-----------------------------|-------------|-------------------------|-----------------------|---|-----|----------------|-----------------------|-----|--------------------|---------|
|                             |             |                         | L                     | T | D/P | Contact Hrs/Wk | CIE                   | SEE | Duration In Hrs/Wk |         |
| Theory Course               |             |                         |                       |   |     |                |                       |     |                    |         |
| 1.                          | OE-III      | Open Elective III       | 3                     |   | -   | 3              | 30                    | 70  | 3                  | 3       |
| 2                           | PE-V        | Professional Elective-V | 3                     |   | -   | 3              | 30                    | 70  | 3                  | 3       |
| Practical/Laboratory Course |             |                         |                       |   |     |                |                       |     |                    |         |
| 3                           | PW861AD     | Project Work-II         |                       |   | 16  | 16             | 50                    | 100 |                    | 8       |
|                             |             |                         |                       |   |     |                |                       |     |                    |         |
| Total                       |             |                         | 6                     |   | 16  | 22             | 110                   | 240 |                    | 14      |

| <b>Profession Elective-V</b> |                              |
|------------------------------|------------------------------|
| Course Code                  | Course Title                 |
| PE851AD                      | Data Engineering             |
| PE852AD                      | Fundamentals of AR and VR    |
| PE853AD                      | High performance computing   |
| PE854AD                      | Devops & Kubernetes          |
| PE855AD                      | Intellectual Property Rights |

| <b>Open Elective – III</b> |         |                                                            |
|----------------------------|---------|------------------------------------------------------------|
| 5                          | OE801AS | Data Visualization (Not for IT & CSE ,CSE stream Students) |

Head of the Department  
Department of CSE  
Methoist College of Engg. & Tech  
Abids, Hyderabad.

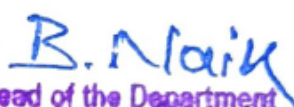
| Open Elective – III |             |                                                                                       |
|---------------------|-------------|---------------------------------------------------------------------------------------|
| S.No.               | Course Code | Course Title                                                                          |
| 1.                  | OE801 EE    | Smart Building Systems ( Not for EEE & EIE)                                           |
| 2.                  | OE802 EE    | Programmable Logic Controllers ( Not for EEE & EIE)                                   |
| 3.                  | OE803 AE    | Automotive Maintenance (Not for Mech./Prod./Automobile Engg. Students)                |
| 4.                  | OE804 ME    | Mechatronics ( Not for Mech./Prod./Automobile Engg. Students)                         |
| 5.                  | OE805 CE    | Essentials of Road Safety Engineering (Not for Civil Engg. Students)                  |
| 6.                  | OE806 CS    | Software Engineering ( Not for CSE, IT , AI&ML,IOT,AI & DS Students)                  |
| 7.                  | OE 807 AS   | Data Visualization (Not for CSE, IT , AI&ML,IOT,AI & DS Students)                     |
| 8.                  | OE808AL     | Human Computer Interaction ( Not for CSE, IT , AI&ML,IOT,AI & DS Students)            |
| 9.                  | OE 809DS    | Cognitive Science and Analytics (Not for CSE, IT , AI&ML,IOT,AI & DS Students)        |
| 10.                 | OE 810 CB   | Principles of Blockchain Technologies ( Not for CSE, IT , AI&ML,IOT,AI & DS Students) |
| 11.                 | OE811IT     | Mobile Computing (Not for CSE, IT , AI&ML,IOT,AI & DS Students)                       |
| 12.                 | OE812EC     | Principles of Embedded Systems (Not for ECE,CSE, IT , AI&ML,IOT,AI & DS Students)     |
| 13.                 | OE813EC     | Fundamentals of Fuzzy Logic (Not for ECE,CSE, IT , AI&ML,IOT,AI & DS Students)        |

  
 Head of the Department  
 Department of CSE  
 Methodist College of Engg. & Tech  
 Abids, Hyderabad.

## SCHEME OF INSTRUCTION AND EXAMINATION

### B.E. (Civil Engineering) - III SEMESTER

| S. No.            | Course Category | Course Title                                         | Scheme of Instruction |   |        |             | Scheme of Examination |     | Credits |
|-------------------|-----------------|------------------------------------------------------|-----------------------|---|--------|-------------|-----------------------|-----|---------|
|                   |                 |                                                      | L                     | T | Pr/Drg | Total Hours | CIE                   | SEE |         |
| Theory Courses    |                 |                                                      |                       |   |        |             |                       |     |         |
| 1                 | 2BS303HS        | Numerical Methods and Partial Differential Equations | 3                     | 1 | -      | 4           | 40                    | 60  | 4       |
| 2                 | 2HS302HS        | Managerial Economics & Financial Accountancy         | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 3                 | 2ES301CS        | Programming for Problem Solving (C)                  | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 4                 | 2PC301CE        | Building Materials and Concrete Technology           | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 5                 | 2PC302CE        | Solid Mechanics                                      | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 6                 | 2PC303CE        | Surveying                                            | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 7                 | 2MC302HS        | Essence of Indian Traditional Knowledge              | 2                     | - | -      | 2           | 40                    | 60  | -       |
| Practical Courses |                 |                                                      |                       |   |        |             |                       |     |         |
| 8                 | 2ES351CS        | Programming for Problem Solving Laboratory (C)       | -                     | - | 2      | 2           | 40                    | 60  | 1       |
| 9                 | 2PC351CE        | Surveying Laboratory                                 | -                     | - | 2      | 2           | 40                    | 60  | 1       |
| 10                | 2PC352CE        | Concrete Technology Laboratory                       | -                     | - | 2      | 2           | 40                    | 60  | 1       |
| Total             |                 |                                                      | 20                    | 1 | 6      | 27          |                       |     | 22      |

  
 Head of the Department  
 Department of Civil Engineering  
 METHODIST COLLEGE OF ENGG. & TECH.  
 King Koti Road, Abids, Hyderabad.

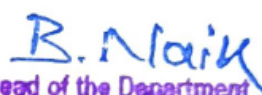


## SCHEME OF INSTRUCTION AND EXAMINATION

### B.E. (Civil Engineering) - IV SEMESTER

| S. No.             | Course Category | Course Title                                     | Scheme of Instruction |   |        |             | Scheme of Examination |     | Credits |
|--------------------|-----------------|--------------------------------------------------|-----------------------|---|--------|-------------|-----------------------|-----|---------|
|                    |                 |                                                  | L                     | T | Pr/Drg | Total Hours | CIE                   | SEE |         |
| Theory Courses     |                 |                                                  |                       |   |        |             |                       |     |         |
| 1                  | 2HS403HS        | Human Values and Professional Ethics             | 2                     | - | -      | 2           | 40                    | 60  | 2       |
| 2                  | 2ES403CS        | Python Programming                               | 2                     | - | -      | 2           | 40                    | 60  | 3       |
| 3                  | 2PC404CE        | Mechanics of Materials and Structures            | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 4                  | 2PC405CE        | Design of Reinforced Concrete Structures         | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 5                  | 2PC406CE        | Fluid Mechanics                                  | 3                     | - | -      | 3           | 40                    | 60  | 3       |
| 6                  | 2PC407CE        | Hydrology                                        | 2                     | - | -      | 2           | 40                    | 60  | 2       |
| 7                  | 2MC403HS        | Constitution of India                            | 2                     | - | -      | 2           | 40                    | 60  | -       |
| Laboratory Courses |                 |                                                  |                       |   |        |             |                       |     |         |
| 8                  | 2PC453CE        | Mechanics of Materials Laboratory                | -                     | - | 2      | 2           | 40                    | 60  | 1       |
| 9                  | 2PC454CE        | Building Drawing & Drafting Laboratory           | -                     | - | 2 x 3h | 6           | 40                    | 60  | 3       |
| 10                 | 2ES453CS        | Python Programming Lab                           | -                     | - | 2      | 2           | 40                    | 60  | 1       |
|                    | PW              | Practise School-1(Short Internship) <sup>#</sup> |                       |   |        |             |                       |     |         |
| Total              |                 |                                                  | 17                    | 0 | 10     | 27          |                       |     | 21      |

<sup>#</sup> To be conducted after the IV Semester in the Summer Vacation and to be evaluated in V Semester

  
 Head of the Department  
 Department of Civil Engineering  
 METHODIST COLLEGE OF ENGG. & TECH.  
 King Kothi Road, Abids, Hyderabad

*MCET (BE - CE) Curriculum for M21 - Regulation*

**B.E. (Civil Engineering) - V SEMESTER**

| S. No.            | Course Code | Course Title                                       | Scheme of Instruction |   |     |             | Scheme of Examination |     | Credits |
|-------------------|-------------|----------------------------------------------------|-----------------------|---|-----|-------------|-----------------------|-----|---------|
|                   |             |                                                    | Hours per week        |   |     |             | Maximum Marks         |     |         |
|                   |             |                                                    | L                     | T | P/D | Total Hours | CIE                   | SEE |         |
| Theory Courses    |             |                                                    |                       |   |     |             |                       |     |         |
| 1                 | 2ES506CE    | Disaster Preparedness and Planning                 | 2                     | - | -   | 2           | 40                    | 60  | 2       |
| 2                 | 2PC508CE    | Structural Analysis                                | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 3                 | 2PC509CE    | Soil Mechanics                                     | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 4                 | 2PC510CE    | Hydraulics Engineering                             | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 5                 | 2PC511CE    | Water Resources Engineering                        | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 6                 | 2PC512CE    | Design of Steel Structures                         | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 7                 | OE          | Open Elective – I                                  | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| Practical Courses |             |                                                    |                       |   |     |             |                       |     |         |
| 8                 | 2PC555CE    | Soil MechanicsLaboratory                           | -                     | - | 2   | 2           | 40                    | 60  | 1       |
| 9                 | 2PC556CE    | Fluid Mechanics & Hydraulic Engineering Laboratory | -                     | - | 2   | 2           | 40                    | 60  | 1       |
| 10                | PW501CE     | Practise School-1/<br>Internship Evaluation        | -                     | - | 2   | 2           | 50                    |     | 2       |
| Total             |             |                                                    | 20                    | 0 | 6   | 26          |                       |     | 24      |

**B.E. (Civil Engineering) - V SEMESTER**

**Open Elective-I**

| S.No. | Course Code | Course Title                       |
|-------|-------------|------------------------------------|
| 1     | OE501CE     | Disaster Mitigation                |
| 2     | 3OE501CE    | Oops using JAVA                    |
| 3     | 1OE501AD    | Artificial Intelligence            |
| 4     | 4OE501EE    | Renewable Energy Systems           |
| 5     | 5OE501EC    | Basics of Electronic Communication |
| 6     | 6OE501ME    | Start-up Entrepreneurship          |

\* Offered by Civil Engineering Department to other departments. CE Students are not eligible to take this course.

*B. Noell*  
Head of the Department  
Department of Civil Engineering  
METHODIST COLLEGE OF ENGG. & TECH.  
BANGALORE

## B.E. (Civil Engineering) - VI SEMESTER

| S. No.            | Course Code | Course Title                          | Scheme of Instruction |   |     |             | Scheme of Examination |     | Credits |
|-------------------|-------------|---------------------------------------|-----------------------|---|-----|-------------|-----------------------|-----|---------|
|                   |             |                                       | Hours per week        |   |     |             | Maximum Marks         |     |         |
|                   |             |                                       | L                     | T | P/D | Total Hours | CIE                   | SEE |         |
|                   |             |                                       |                       |   |     |             |                       |     |         |
| Theory Courses    |             |                                       |                       |   |     |             |                       |     |         |
| 1                 | 2PC613CE    | Construction Engineering & Management | 2                     | - | -   | 2           | 40                    | 60  | 2       |
| 2                 | 2PC614CE    | Transportation Engineering            | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 3                 | 2PC615CE    | Environmental Engineering             | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 4                 | 2PC616CE    | Foundation Engineering                | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 5                 | PE          | Professional Elective - I             | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 6                 | PE          | Professional Elective - II            | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| 7                 | OE          | Open Elective -II                     | 3                     | - | -   | 3           | 40                    | 60  | 3       |
| Practical Courses |             |                                       |                       |   |     |             |                       |     |         |
| 8                 | 2HS653HS    | Soft Skills Laboratory                | -                     | - | 2   | 2           | 40                    | 60  | 1       |
| 9                 | 2PC657CE    | Transportation Engineering Laboratory | -                     | - | 2   | 2           | 40                    | 60  | 1       |
| 10                | 2PC658CE    | Environmental Engineering Laboratory  | -                     | - | 2   | 2           | 40                    | 60  | 1       |
|                   | PW          | Practise School-2/<br>Mini Project #  |                       |   |     |             |                       |     |         |
| Total             |             |                                       | 20                    | 0 | 6   | 26          |                       |     | 23      |

# To be conducted after the VI Semester in the Summer Vacation and to be evaluated in VII Semester

**Professional Elective – I**

| S. No. | PE Stream | Course Title             |
|--------|-----------|--------------------------|
| 1      | 2PE601CE  | Prestressed Structures   |
| 2      | 2PE602CE  | Ground Water Engineering |

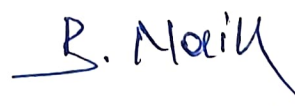
**Professional Elective – II**

| S. No. | PE Stream | Course Title                                        |
|--------|-----------|-----------------------------------------------------|
| 1      | 2PE603CE  | Structural Engineering Design and Detailing-1 (RCC) |
| 2      | 2PE604CE  | Advanced Surveying                                  |

**Open Elective – II**

| S.No. | Course Code | Course Title                 |
|-------|-------------|------------------------------|
| 1     | OE602CE     | Green Building Technologies* |
| 2     | 3OE602CS    | Software Engineering         |
| 3     | 1OE602AD    | Deep Learning                |
| 4     | 4OE602EE    | Electric Vehicle Technology  |
| 5     | 5OE602EC    | Fundamentals of IOT          |
| 6     | 6OE602ME    | 3D Printing                  |

\* Offered by Civil Engineering Department to other departments. CE Students are not eligible to take this course.

  
Head of the Department  
Department of Civil Engineering  
METHODIST COLLEGE OF ENG. & TECH.  
King Koti Road, Abids, Hyderabad



**SCHEME OF INSTRUCTION & EXAMINATION****B.E. (Civil Engineering) VII– SEMESTER**

| S. No.                        | Course Code | Course Title                            | Scheme of Instruction |   |            | Scheme of Examination |     | Credits |
|-------------------------------|-------------|-----------------------------------------|-----------------------|---|------------|-----------------------|-----|---------|
|                               |             |                                         | L                     | T | Pr/<br>Drg | CIE                   | SEE |         |
| Theory Courses                |             |                                         |                       |   |            |                       |     |         |
| 1                             | PC426CE     | Estimation and Specification            | 2                     | - | -          | 30                    | 70  | 2       |
| 2                             | ES310 CE    | Disaster Preparedness & Planning        | 3                     | - | -          | 30                    | 70  | 3       |
| 3                             | PE          | Professional Elective - 4               | 3                     | - | -          | 30                    | 70  | 3       |
| 4                             | PE          | Professional Elective - 5               | 3                     | - | -          | 30                    | 70  | 3       |
| 5                             | PE          | Professional Elective - 6               | 3                     | - | -          | 30                    | 70  | 3       |
| 6                             | OE          | Open Elective -2                        | 3                     | - | -          | 30                    | 70  | 3       |
| 7                             | MC 802 HS   | Essence of Indian Traditional Knowledge | 2                     | - | -          | 30                    | 70  | -       |
| Practical/ Laboratory Courses |             |                                         |                       |   |            |                       |     |         |
| 8                             | PC427CE     | Estimation and Specification Laboratory | -                     | - | 2          | 25                    | 50  | 1       |
| 9                             | PW 702CE    | Summer Internship Evaluation            | -                     | - | -          | 50*                   |     | 2       |
| 10                            | PW 703CE    | Project Work – I                        |                       |   | 6          | 50                    |     | 3       |
|                               |             |                                         | 19                    | - | 8          |                       |     | 23      |

\*Evaluation of Technical Report and Seminar based on summer industrial Internship/Mini Project

| <b>Professional Elective – 4</b> |             |                                                                          |
|----------------------------------|-------------|--------------------------------------------------------------------------|
| S.No.                            | Course Code | Course Title                                                             |
| 1                                | PE 513 CE   | Prestressed Concrete                                                     |
| 2                                | PE 514 CE   | Highway Construction and Management                                      |
| 3                                | PE 515 CE   | Environmental Impact Assessment of Civil Engineering Projects            |
| 4                                | PE 516 CE   | Instrumentation & Sensor Technologies for Civil Engineering Applications |

| <b>Professional Elective – 5</b> |             |                                           | <b>Professional Elective – 6</b> |             |                               |
|----------------------------------|-------------|-------------------------------------------|----------------------------------|-------------|-------------------------------|
| S.No.                            | Course Code | Course Title                              | S.No.                            | Course Code | Course Title                  |
| 1                                | PE 517 CE   | Structural Engineering Design & Detailing | 1                                | PE 521 CE   | Finite Element Method         |
| 2                                | PE 518 CE   | Intelligent Transportation Systems        | 2                                | PE 522 CE   | Urban Transportation Planning |
| 3                                | PE 519 CE   | Water and Air Quality Modelling           | 3                                | PE 523 CE   | Surface Hydrology             |
| 4                                | PE 520 CE   | Green Building Technologies               | 4                                | PE 524 CE   | GIS and Remote Sensing        |

| <b>Open Elective -2</b> |             |                                                                                  |
|-------------------------|-------------|----------------------------------------------------------------------------------|
| S.No.                   | Course Code | Course Title                                                                     |
| 1                       | OE602 CE    | Principles of Green Buildings (Not for Civil Engg. Students)                     |
| 2                       | OE603 EE    | Non-Conventional Energy Sources (Not for EEE & EIE Students)                     |
| 3                       | OE604 EE    | Transducers and Sensors (Not for EEE & EIE Students)                             |
| 4                       | OE621 AE    | Automotive Safety and Ergonomics (Not for Mech./Prod./Automobile Engg. students) |
| 5                       | OE621 ME    | Entrepreneurship (Not for Mech./Prod./Automobile Engg. students)                 |
| 6                       | OE602 CS    | Data Science Using R (Not for CSE Students)                                      |
| 7                       | OE 603 IT   | Cyber Security (Not for IT Students)                                             |
| 8                       | OE603 EE    | Non-Conventional Energy Sources (Not for EEE & EIE Students)                     |

## SCHEME OF INSTRUCTION &amp; EXAMINATION

## B.E. (Civil Engineering) VIII– SEMESTER

| S. No.                        | Course Code | Course Title              | Scheme of Instruction |   |         | Scheme of Examination |     | Credits |
|-------------------------------|-------------|---------------------------|-----------------------|---|---------|-----------------------|-----|---------|
|                               |             |                           | L                     | T | Pr/ Drg | CIE                   | SEE |         |
| Theory Courses                |             |                           |                       |   |         |                       |     |         |
| 1                             | MC 803 HS   | Constitution of India     | 2                     | - | -       | 30                    | -   | -       |
| 2                             | PE          | Professional Elective – 7 | 3                     | - | -       | 30                    | 70  | 3       |
| 3                             | OE          | Open Elective -3          | 3                     | - | -       | 30                    | 70  | 3       |
| Practical/ Laboratory Courses |             |                           |                       |   |         |                       |     |         |
| 4                             | PW 704 CE   | Project Work - II         | -                     | - | 10      | 50                    | 100 | 5       |
|                               |             |                           | 8                     | - | 10      |                       |     | 11      |

| Professional Elective – 7 |             |                                      |
|---------------------------|-------------|--------------------------------------|
| S.No.                     | Course Code | Course Title                         |
| 1                         | PE 525 CE   | Advanced Reinforced Concrete Design  |
| 2                         | PE 526 CE   | Ground Improvement Techniques        |
| 3                         | PE 527 CE   | Principles of Climate Change         |
| 4                         | PE 528 CE   | Repair and Rehabilitation Techniques |

| Open Elective – 3 |             |                                                                        |
|-------------------|-------------|------------------------------------------------------------------------|
| S.No.             | Course Code | Course Title                                                           |
| 1                 | OE605 EE    | Smart Building Systems (Not for EEE & EIE Students)                    |
| 2                 | OE606 EE    | Programmable Logic Controllers (Not for EEE & EIE Students)            |
| 3                 | OE631 AE    | Automotive Maintenance (Not for Mech./Prod./Automobile Engg. students) |
| 4                 | OE631 ME    | Mechatronics (Not for Mech./Prod./Automobile Engg. students)           |
| 5                 | OE603 CE*   | Essentials of Road Safety Engineering (Not for Civil Engg. Students)   |
| 6                 | OE604 IT    | Software Engineering (Not for IT Students)                             |

\* Offered by Civil Engineering Department. CE Students are not eligible to take this course

**METHODIST COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

| 1.1 Number of courses offered by the Institution across all programs during the year |              |             |                                                |                      |
|--------------------------------------------------------------------------------------|--------------|-------------|------------------------------------------------|----------------------|
| Program code                                                                         | Program Name | Course code | Course Name                                    | Year of introduction |
|                                                                                      |              | III SEM     |                                                |                      |
| 734                                                                                  | EEE          | 4BS303HS    | NMFS – Numerical Methods and Fourier Series    | 2022-23              |
| 734                                                                                  | EEE          | 4PC301EE    | EMF – Electro Magnetic Fields                  | 2022-23              |
| 734                                                                                  | EEE          | 4ES302EE    | EC-I – Electrical Circuits-I                   | 2022-23              |
| 734                                                                                  | EEE          | 4ES304CS    | PPS – Programming for Problem Solving          | 2022-23              |
| 734                                                                                  | EEE          | 4PC303EE    | ADE – Analog and Digital Electronics           | 2022-23              |
| 734                                                                                  | EEE          | 4HS302HS    | HVPE – Human Values & Professional Ethics      | 2022-23              |
| 734                                                                                  | EEE          | 4MC302HS    | EITK – Essence of Indian Traditional Knowledge | 2022-23              |
| 734                                                                                  | EEE          | 4PC351EE    | ADE Lab – Analog and Digital Electronics Lab   | 2022-23              |
| 734                                                                                  | EEE          | 4ES354CS    | PPS Lab – Programming for Problem Solving      | 2022-23              |
|                                                                                      |              | IV SEM      |                                                |                      |
| 734                                                                                  | EEE          | 4HS403BM    | MEFA-Managerial economics and                  | 2022-23              |
| 734                                                                                  | EEE          | 4PC404EE    | PS-I – Power system -I                         | 2022-23              |
| 734                                                                                  | EEE          | 4PC405EE    | EM-I – Electrical Machines-I                   | 2022-23              |
| 734                                                                                  | EEE          | 4PC407EE    | EC-II – Electrical circuits-II                 | 2022-23              |
| 734                                                                                  | EEE          | 4ES405CP    | PYP – Python programming                       | 2022-23              |
| 734                                                                                  | EEE          | 4MC403HS    | IC-Indian Constitution                         | 2022-23              |
| 734                                                                                  | EEE          | 4PC406EE    | CS – Control system                            | 2022-23              |
| 734                                                                                  | EEE          | 4PC453EE    | EC Lab – Electrical circuits Lab               | 2022-23              |
| 734                                                                                  | EEE          | 4ES455CS    | PYP Lab – Python programming Lab               | 2022-23              |
| 734                                                                                  | EEE          | 4pc453ee    | CS Lab – Control systems Lab                   | 2022-23              |
|                                                                                      |              | V SEM       |                                                |                      |
| 734                                                                                  | EEE          | 4PC508EE    | Electrical Machines –II                        | 2023-24              |
| 734                                                                                  | EEE          | 4PC509EE    | Power Electronics                              | 2023-24              |
| 734                                                                                  | EEE          | 4PC510EE    | Power Systems –II                              | 2023-24              |
| 734                                                                                  | EEE          | 4PC511EE    | Electrical Measurements and Instrumentation    | 2023-24              |
| 734                                                                                  | EEE          | 4PE5—EE     | Professional Elective-I                        | 2023-24              |
| 734                                                                                  | EEE          | 4HS504HS    | Effective Technical Communication              | 2023-24              |
| 734                                                                                  | EEE          | 4PE501EE    | Electrical Safety and Standards                | 2023-24              |
| 734                                                                                  | EEE          | 4PE502EE    | Renewable Energy Systems                       | 2023-24              |
| 734                                                                                  | EEE          | 4PE503EE    | Digital Control Systems                        | 2023-24              |
| 734                                                                                  | EEE          | 4OE501CS    | OOPS using Java                                | 2023-24              |
| 734                                                                                  | EEE          | 4OE502CE    | Disaster management                            | 2023-24              |
| 734                                                                                  | EEE          | 4OE503ME    | Energy Systems                                 | 2023-24              |
| 734                                                                                  | EEE          | 4OE504AI    | Artificial Intelligence                        | 2023-24              |
| 734                                                                                  | EEE          | 4OE505EC    | Basics of Electronic Communication             | 2023-24              |
| 734                                                                                  | EEE          | 4PC554EE    | Electrical Machines-I Lab                      | 2023-24              |

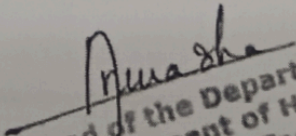


|     |     |          |                                                         |         |
|-----|-----|----------|---------------------------------------------------------|---------|
| 734 | EEE | 4PC555EE | Electrical Measurements and Instrumentation Lab         | 2023-24 |
| 734 | EEE | VI SEM   |                                                         |         |
| 734 | EEE | 4PC612EE | Switch Gear and Protection                              | 2023-24 |
| 734 | EEE | 4PC613EE | Power Electronics Control of Electrical Drives          | 2023-24 |
| 734 | EEE | 4PC614EE | Microprocessors & Micro Controllers                     | 2023-24 |
| 734 | EEE | 4ES606EC | Signals & Systems                                       | 2023-24 |
| 734 | EEE | 4PE604EE | Energy Management Systems and SCADA                     | 2023-24 |
| 734 | EEE | 4PE605EE | Electric Vehicles                                       | 2023-24 |
| 734 | EEE | 4PE606EE | Self Study Course                                       | 2023-24 |
| 734 | EEE | 20E601EE | Open Elective-II GBT-Green Building Technology          | 2023-24 |
| 734 | EEE | 4PC656EE | EM-II Lab – Electrical Machines-II Lab                  | 2023-24 |
| 734 | EEE | 4PC657EE | PED Lab-Power Electronics and Drives Lab                | 2023-24 |
| 734 | EEE | 4hs654hs | SS Lab-Soft Skills Lab                                  | 2023-24 |
| 734 | EEE | 4pw601ee | Mini Project Seminar                                    | 2023-24 |
|     |     | VII SEM  |                                                         |         |
| 734 | EEE | PC428EE  | CED – Control of Electric Drives                        | 2022-23 |
| 734 | EEE | PC429EE  | SGP – Switch Gear and Protection                        | 2022-23 |
| 734 | EEE | PC430EE  | PEAPS – Power Electronics Applications to Power Systems | 2022-23 |
| 734 | EEE | PE502EE  | SEM – Special Electrical Machines                       | 2022-23 |
| 734 | EEE | PE509EE  | PQ – Power Quality Engineering                          | 2022-23 |
| 734 | EEE | PE501EE  | Electrical Machine Design                               | 2022-23 |
| 734 | EEE | PE505EE  | High Voltage Engineering                                | 2022-23 |
| 734 | EEE | PE506EE  | Digital Control Systems                                 | 2022-23 |
| 734 | EEE | PE510EE  | EMSSCADA – Energy Management Systems and SCADA          | 2022-23 |
| 734 | EEE | PC462EE  | PS Lab – Power Systems Lab                              | 2022-23 |
| 734 | EEE | PC466EE  | ES Lab – Electrical Simulation Lab                      | 2022-23 |
| 734 | EEE | PW702EE  | PW-I – Project Work phase-I                             | 2022-23 |
| 734 | EEE | PW701EE  | SI - Summer Internship                                  | 2022-23 |
|     |     | VIII SEM |                                                         |         |
| 734 | EEE | PE511EE  | AI Techniques in Electrical Engineering                 | 2022-23 |
| 734 | EEE | PE512EE  | Advances in Power Electronics                           | 2022-23 |
| 734 | EEE | PE513EE  | Grid Integration of Renewable Energy Systems            | 2022-23 |
| 734 | EEE | PE514EE  | Smart Grid Technology                                   | 2022-23 |
| 734 | EEE | OE631AE  | Automotive Maintenance                                  | 2022-23 |
| 734 | EEE | OE631ME  | Mechatronics                                            | 2022-23 |
| 734 | EEE | OE603CE  | Road Safety Engineering                                 | 2022-23 |
| 734 | EEE | OE604IT  | Software Engineering                                    | 2022-23 |
| 734 | EEE | PW703EE  | Project Work Phase – II                                 | 2022-23 |



Scheme of Instruction & Examination  
B.E. FIRST YEAR  
ELECTRICAL AND ELECTRONICS ENGINEERING

| S. No          | Course Code | Course Title                  | Semester - I          |   |     |                 | Scheme of Examination |     | Credits |
|----------------|-------------|-------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
|                |             |                               | Scheme of Instruction |   |     | Duration in Hrs | Maximum Marks         |     |         |
|                |             |                               | Hours Per week        |   |     |                 |                       |     |         |
|                |             |                               | L                     | T | P/D |                 |                       |     |         |
| Theory Courses |             |                               |                       |   |     |                 |                       |     |         |
| 1              | 4BS101 HS   | Engineering Mathematics - I   | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 2              | 4BS106 HS   | Chemistry                     | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 3              | 4HS101 HS   | English                       | 2                     | 0 | 0   | 2               | 40                    | 60  | 2       |
| 4              | 4ES103 CE   | Engineering Mechanics         | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| Laboratories   |             |                               |                       |   |     |                 |                       |     |         |
| 5              | 4BS153 HS   | Chemistry Lab                 | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 6              | 4HS151 HS   | English Lab                   | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 7              | 4ES152 ME   | Engineering Workshop Practice | 0                     | 0 | 4   | 4               | 40                    | 60  | 2       |
| 8              | 4MC15 ISP   | Yoga/NSS/Sports               | 0                     | 0 | 2   | 2               | 50                    | -   | 0       |
|                |             | Total                         | 11                    | 2 | 11  | 24              | 330                   | 420 | 17.5    |

  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001



| S<br>N<br>o                   | Course<br>Code | Course Title                                         | Semester - II     |   |     |                                       | Scheme of<br>Instruction |     | Scheme of<br>Examination |  | Credit<br>s |
|-------------------------------|----------------|------------------------------------------------------|-------------------|---|-----|---------------------------------------|--------------------------|-----|--------------------------|--|-------------|
|                               |                |                                                      | Hours Per<br>week |   |     | D<br>ur<br>ati<br>on<br>in<br>H<br>rs | Maximum<br>Marks         |     |                          |  |             |
|                               |                |                                                      | L                 | T | P/D |                                       | CIE                      | SEE |                          |  |             |
|                               |                |                                                      |                   |   |     |                                       |                          |     |                          |  |             |
| Theory Courses                |                |                                                      |                   |   |     |                                       |                          |     |                          |  |             |
| 1                             | 4BS202HS       | Engineering Mathematics - II                         | 3                 | 1 | 0   | 4                                     | 40                       | 60  | 4                        |  |             |
| 2                             | 4BS204HS       | Applied Physics                                      | 3                 | 1 | 0   | 4                                     | 40                       | 60  | 4                        |  |             |
| 3                             | 4ES203EE       | Principles of Electrical and Electronics Engineering | 3                 | 0 | 0   | 3                                     | 40                       | 60  | 3                        |  |             |
| 4                             | 4ES204ME       | Principles of Mechanical Engineering                 | 3                 | 0 | 0   | 3                                     | 40                       | 60  | 3                        |  |             |
| 5                             | 4MC201CE       | Environmental Science                                | 2                 | 0 | 0   | 2                                     | 40                       | 60  | 0                        |  |             |
| Laboratories                  |                |                                                      |                   |   |     |                                       |                          |     |                          |  |             |
| 6                             | 4BS251HS       | Applied Physics Lab                                  | 0                 | 0 | 3   | 3                                     | 40                       | 60  | 1.5                      |  |             |
| 7                             | 4ES253ME       | Principles of Mechanical Engineering Lab             | 0                 | 0 | 2   | 2                                     | 40                       | 60  | 1                        |  |             |
| 8                             | 4ES252CE       | Engineering Graphics Lab                             | 1                 | 0 | 4   | 5                                     | 40                       | 60  | 3                        |  |             |
|                               |                | Total                                                | 15                | 2 | 9   | 26                                    | 320                      | 480 | 19.5                     |  |             |
| ES - Engineering Sciences HS: |                |                                                      |                   |   |     |                                       |                          |     |                          |  |             |

BS: Basic Sciences  
Humanities and Sciences

ES: Engineering Sciences

HS:

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T: Tutorials P: Practicals D: Drawing

Note: 1). Each Contact Hour is a Clock hour

*Anusha*  
Head of the Department  
Department of H & S  
Methodist College of Engg. & Tech.  
Abids, Hyderabad-500 001



**Scheme of Instruction & Examination**  
**B.E. SECOND YEAR , III SEMESTER**  
**ELECTRICAL AND ELECTRONICS ENGINEERING**

| Semester - III |             |                                         |                       |   |   |    |                       |     |         |
|----------------|-------------|-----------------------------------------|-----------------------|---|---|----|-----------------------|-----|---------|
| S. No          | Course Code | Course Title                            | Scheme of Instruction |   |   |    | Scheme of Examination |     | Credits |
|                |             |                                         | Hours Per week        |   |   |    | Maximum Marks         |     |         |
|                |             |                                         |                       |   |   |    | CIE                   | SEE |         |
| L              | T           | P/D                                     | Duration in Hrs       |   |   |    |                       |     |         |
| Theory Courses |             |                                         |                       |   |   |    |                       |     |         |
| 1              | 4BS303HS    | Engineering Mathematics - III           | 3                     | 1 | 0 | 4  | 40                    | 60  | 4       |
| 2              | 4PC301EE    | Electro Magnetic Fields                 | 3                     | 0 | 0 | 3  | 40                    | 60  | 3       |
| 3              | 4PC302EE    | Electrical Circuits-I                   | 3                     | 0 | 0 | 3  | 40                    | 60  | 3       |
| 4              | 4ES304CS    | Programming for Problem Solving         | 3                     | 0 | 0 | 3  | 40                    | 60  | 3       |
| 5              | 4PC303EE    | Analog and Digital Electronics          | 3                     | 0 | 0 | 3  | 40                    | 60  | 3       |
| 6              | 4HS302HS    | Human Values & Professional Ethics      | 2                     | 0 | 0 | 2  | 40                    | 60  | 2       |
| 7              | 4MC302HS    | Essence of Indian traditional knowledge | 2                     | 0 | 0 | 2  | 40                    | 60  | -       |
| Laboratories   |             |                                         |                       |   |   |    |                       |     |         |
| 8              | 4PC351EE    | Analog and Digital Electronics Lab      | 0                     | 0 | 2 | 2  | 40                    | 60  | 1       |
| 9              | 4ES354CS    | Programming for Problem Solving Lab     | 0                     | 0 | 2 | 2  | 40                    | 60  | 1       |
|                |             | Total                                   | 19                    | 1 | 5 | 25 | 360                   | 540 | 20      |

HS: Humanities and Social Sciences

MC: Mandatory Course

L: Lecture

CIE: Continuous Internal Evaluation

BS: Basic Science

PC: Professional Core

T: Tutorial

SEE: Semester End Evaluation (Univ. Exam)

ES: Engineering Science

P: Practical

D: Drawing

EE: Electrical Engg.

**Note:**

- Each contact hour is a clock hour.
- The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
Head of Department  
Department of EEE  
Methodist College of Engg & Tech.  
Abids, Hyderabad-500 001.



**Scheme of Instruction & Examination**  
**B.E. SECOND YEAR, III SEMESTER**  
**ELECTRICAL AND ELECTRONICS ENGINEERING**

| Semester - IV  |             |                                           |                       |   |   |    |                       |     |    | Credits |
|----------------|-------------|-------------------------------------------|-----------------------|---|---|----|-----------------------|-----|----|---------|
| S. No          | Course Code | Course Title                              | Scheme of Instruction |   |   |    | Scheme of Examination |     |    |         |
|                |             |                                           |                       |   |   |    | Maximum Marks         |     |    |         |
|                |             |                                           | Hours Per week        |   |   |    | CIE                   | SEE |    |         |
|                |             |                                           |                       |   |   |    |                       |     | L  |         |
| Theory Courses |             |                                           |                       |   |   |    |                       |     |    |         |
| 1              | 4HS403BM    | Managerial Economics & Financial Accounts | 3                     | 0 | 0 | 3  | 40                    | 60  | 3  |         |
| 2              | 4PC404EE    | Power Systems-I                           | 3                     | 0 | 0 | 3  | 40                    | 60  | 3  |         |
| 3              | 4PC405EE    | Electrical Machines-I                     | 3                     | 0 | 0 | 3  | 40                    | 60  | 3  |         |
| 4              | 4PC406EE    | Control Systems                           | 3                     | 0 | 0 | 3  | 40                    | 60  | 4  |         |
| 5              | 4PC407EE    | Electrical Circuits-II                    | 3                     | 1 | 0 | 3  | 40                    | 60  | 3  |         |
| 6              | 4ES405CS    | Python Programming                        | 3                     | 0 | 0 | 3  | 40                    | 60  | -  |         |
| 7              | 4MC403HS    | Indian Constitution                       | 2                     | 0 | 0 | 2  | 40                    | 60  | -  |         |
| Laboratories   |             |                                           |                       |   |   |    |                       |     |    |         |
| 8              | 4PC452EE    | Electrical Circuits Lab                   | 0                     | 0 | 2 | 2  | 25                    | 50  | 1  |         |
| 9              | 4PC453EE    | Control Systems Lab                       | 0                     | 0 | 2 | 2  | 25                    | 50  | 1  |         |
| 10             | 4ES455CS    | Python Programming Lab                    | 0                     | 0 | 2 | 2  | 25                    | 50  | 1  |         |
|                |             | Total                                     | 20                    | 0 | 8 | 28 | 355                   | 570 | 22 |         |

HS: Humanities and Social Sciences  
MC: Mandatory Course  
L: Lecture  
CIE: Continuous Internal Evaluation

BS: Basic Science  
PC: Professional Core  
T: Tutorial  
SEE: Semester End Evaluation (Univ. Exam)

ES: Engineering Science  
P: Practical  
D: Drawing  
EE: Electrical Engg.

**Note:**

1. Each contact hour is a clock hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
Head of Department  
Department of EEE  
Methodist College of Engg & Tech.  
Abids, Hyderabad-500 001.



**MCET, EEE Curriculum for the Academic Year 2023-24**

| Semester-V     |             |                                                 |                       |   |     |                 |                       |     |    | Credits |
|----------------|-------------|-------------------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|----|---------|
| S. No          | Course Code | Course Title                                    | Scheme of Instruction |   |     |                 | Scheme of Examination |     |    |         |
|                |             |                                                 | Hours Per week        |   |     |                 | Maximum Marks         |     |    |         |
|                |             |                                                 |                       |   |     |                 | CIE                   | SEE |    |         |
|                |             |                                                 | L                     | T | P/D | Duration in Hrs |                       |     |    |         |
|                |             |                                                 |                       |   |     |                 |                       |     |    |         |
| Theory Courses |             |                                                 |                       |   |     |                 |                       |     |    |         |
| 1              | 4PC508EE    | Electrical Machines –II                         | 3                     | 1 | 0   | 4               | 40                    | 60  | 4  |         |
| 2              | 4PC509EE    | Power Electronics                               | 3                     | 0 | 0   | 3               | 40                    | 60  | 3  |         |
| 3              | 4PC510EE    | Power Systems –II                               | 3                     | 0 | 0   | 3               | 40                    | 60  | 3  |         |
| 4              | 4PC511EE    | Electrical Measurements and Instrumentation     | 3                     | 0 | 0   | 3               | 40                    | 60  | 3  |         |
| 5              | 4PE5—EE     | Professional Elective-I                         | 3                     | 0 | 0   | 3               | 40                    | 60  | 2  |         |
| 6              | 4HS504HS    | Effective Technical Communication               | 2                     | 0 | 0   | 2               | 40                    | 60  | 3  |         |
| 7              | 4OE5--      | Open Elective-I                                 | 3                     | 0 | 0   | 3               | 40                    | 60  | 3  |         |
| Laboratories   |             |                                                 |                       |   |     |                 |                       |     |    |         |
| 8              | 4PC554EE    | Electrical Machines-I Lab                       | 0                     | 0 | 2   | 2               | 40                    | 60  | 1  |         |
| 9              | 4PC555EE    | Electrical Measurements and Instrumentation Lab | 0                     | 0 | 2   | 2               | 40                    | 60  | 1  |         |
|                |             | Total                                           | 20                    | 1 | 4   | 25              | 360                   | 540 | 23 |         |

| Professional Elective |          |                                 |
|-----------------------|----------|---------------------------------|
| 1                     | 4PE501EE | Electrical Safety and Standards |
| 2                     | 4PE502EE | Renewable Energy Systems        |
| 3                     | 4PE503EE | Digital Control Systems         |

| Open Elective |          |                                                  |
|---------------|----------|--------------------------------------------------|
| 1             | 4OE501CS | OOPS using Java (Not for CSE & AIDS)             |
| 2             | 4OE502CE | Disaster management (Not for CE)                 |
| 3             | 4OE503ME | Energy Systems (Not for ME)                      |
| 4             | 4OE504AI | Artificial Intelligence (Not for CSE & AIDS)     |
| 5             | 4OE505EC | Basics of Electronic Communication (Not for ECE) |
| 6             | 4OE506EE | Renewable Energy Sources (Not for EEE)           |

HS: Humanities and Social Sciences  
MC: Mandatory Course  
L: Lecture  
CIE: Continuous Internal Evaluation

BS: Basic Science  
PC: Professional Core  
T: Tutorial  
SEE: Semester End Evaluation (Univ. Exam)

ES: Engineering Science  
PE: Professional Elective OE: Open Elective  
P: Practical  
D: Drawing  
EE: Electrical Engg.

**Note:**

- Each contact hour is a clock hour.
- The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.



**MCET, EEE Curriculum for the Academic Year 2023-24**

| MCET , EEE Curriculum for the Academic Year 2025-26 |             |                                                |                       |   |     |                 |                       |     |         |
|-----------------------------------------------------|-------------|------------------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
| S. No                                               | Course Code | Course Title                                   | Semester-VI           |   |     |                 | Scheme of Examination |     | Credits |
|                                                     |             |                                                | Scheme of Instruction |   |     |                 | Maximum Marks         |     |         |
|                                                     |             |                                                | Hours Per week        |   |     |                 | CIE                   | SEE |         |
|                                                     |             |                                                | L                     | T | P/D | Duration in Hrs |                       |     |         |
| Theory Courses                                      |             |                                                |                       |   |     |                 |                       |     |         |
|                                                     |             |                                                |                       |   |     |                 | 40                    | 60  | 3       |
| 1                                                   | 4PC612EE    | Switch Gear and Protection                     | 3                     | 0 | 0   | 4               | 40                    | 60  | 3       |
| 2                                                   | 4PC613EE    | Power Electronics Control of Electrical Drives | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 3                                                   | 4PC614EE    | Microprocessors & Micro Controllers            | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 4                                                   | 4ES606EC    | Signals & Systems                              | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 5                                                   | 4PE6--EE    | Professional Elective-II                       | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 6                                                   | 4OE6--      | Open Elective -II                              | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| Laboratories                                        |             |                                                |                       |   |     |                 |                       |     |         |
| 7                                                   | 4PC656EE    | Electrical Machines-II Lab                     | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 8                                                   | 4PC657EE    | Power Electronics and Drives Lab               | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 9                                                   | 4PW601EE    | Mini Project Seminar                           | 0                     | 0 | 2   | 2               | 50                    | -   | 1       |
| 10                                                  | 4HS654HS    | Soft Skills Lab                                | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 11                                                  | 4PW701EE    | Summer Internship*                             | 4 weeks during summer |   |     |                 | 360                   | 540 | 23      |
|                                                     |             | Total                                          | 20                    | 1 | 4   | 25              |                       |     |         |

| Professional Elective |          |                                     |
|-----------------------|----------|-------------------------------------|
| 1                     | 4PE604EE | Energy Management Systems and SCADA |
| 2                     | 4PE605EE | Electric Vehicles                   |
| 3                     | 4PE606EE | Self Study Course                   |

| Open Elective |  |                                                  |
|---------------|--|--------------------------------------------------|
| 1             |  | OOPS using Java (Not for CSE & AIDS)             |
| 2             |  | Disaster management (Not for CE)                 |
| 3             |  | Energy Systems (Not for ME)                      |
| 4             |  | Artificial Intelligence (Not for CSE & AIDS)     |
| 5             |  | Basics of Electronic Communication (Not for ECE) |
| 6             |  | Renewable Energy Sources (Not for EEE)           |

HS: Humanities and Social Sciences  
MC: Mandatory Course  
PW: Project Work  
CIE: Continuous Internal Evaluation

BS: Basic Science  
PC: Professional Core  
L: Lecture  
SEE: Semester End Evaluation (Univ.Exam)

ES: Engineering Science  
PE: Professional Elective OE: Open Elective  
T: Tutorial P: Practical D: Drawing  
EE: Electrical Engg.

**Note:**

Each contact hour is a clock hour.  
The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

Students have to undergo summer internship of 4-6 weeks at the end of semester VI and credits will be awarded after evaluation in VII semester.



**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. (Electrical and Electronics Engineering) VII – SEMESTER**

| S. No                          | Course Code | Course Title                                   | Scheme of Instruction |   |     |                | Scheme of Examination |     |                 | Credits |
|--------------------------------|-------------|------------------------------------------------|-----------------------|---|-----|----------------|-----------------------|-----|-----------------|---------|
|                                |             |                                                | L                     | T | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration In Hrs |         |
| Theory Courses                 |             |                                                |                       |   |     |                |                       |     |                 |         |
| 1                              | PC428EE     | Control of Electric Drives                     | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 2                              | PC429EE     | Switchgear and Protection                      | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 3                              | PC430EE     | Power Electronic Applications to Power Systems | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 4                              | PE5_EE      | Professional Elective - III                    | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 5                              | PE5_EE      | Professional Elective - IV                     | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 6                              | OE6_EE      | Open Elective – II                             | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| Practical / Laboratory Courses |             |                                                |                       |   |     |                |                       |     |                 |         |
| 7                              | PC465EE     | Microprocessors and Microcontrollers Lab       | -                     | - | 2   | 2              | 25                    | 50  | 3               | 1       |
| 8                              | PC466EE     | Electrical Simulation Lab                      | -                     | - | 2   | 2              | 25                    | 50  | 3               | 1       |
| 9                              | PW702EE     | Project Work Phase – I                         | -                     | - | 6   | 6              | 25                    | 50  | -               | 3       |
| 10                             | PW701EE     | Summer Internship*                             | -                     | - | -   | -              | 50                    | -   | -               | 1       |
| Total                          |             |                                                | 18                    | - | 10  | 28             | 305                   | 570 | -               | 24      |

| <b>Professional Elective – III &amp; IV</b> |         |                                     |
|---------------------------------------------|---------|-------------------------------------|
| 1                                           | PE507EE | Electrical Distribution Systems     |
| 2                                           | PE508EE | Utilization of Electric Energy      |
| 3                                           | PE509EE | Power Quality Engineering           |
| 4                                           | PE510EE | Energy Management Systems and SCADA |

| <b>Open Elective – II</b> |           |                                                                             |
|---------------------------|-----------|-----------------------------------------------------------------------------|
| 1                         | OE603EE   | Non-Conventional Energy Sources (Not for EEE & EIE Students)                |
| 2                         | OE604EE   | Transducers and Sensors (Not for EEE & EIE Students)                        |
| 3                         | OE621AE   | Automotive Safety and Ergonomics (Not for Mech./Prod./Auto. Engg. students) |
| 4                         | OE621ME   | Entrepreneurship (Not for Mech./Prod./Automobile Engg. students)            |
| 5                         | OE811CE   | Green Building Technologies (Not for Civil Engg. Students)                  |
| 6                         | OE802CS   | Data Science Using R (Not for CSE Students)                                 |
| 7                         | OE 816 IT | Cyber Security (Not for IT Students)                                        |

HS: Humanities and Social Sciences  
MC: Mandatory Course  
L: Lecture  
CIE: Continuous Internal Evaluation

BS: Basic Science  
PC: Professional Core  
T: Tutorial  
SEE: Semester End Evaluation (Univ. Exam)

ES: Engineering Science  
PE: Professional Elective  
P: Practical

D: Drawing  
EE: Electrical Engg.

**Note:**

- Each contact hour is a clock hour.
- The duration of the practical class is two hours, however it can be extended wherever necessary to enable the student to complete the experiment.
- The students have to undergo a Summer Internship of six-week duration after VI-Semester and credits will be awarded in VII-Semester after evaluation.



**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. (Electrical and Electronics Engineering) VIII – SEMESTER**

| B.E. (Electrical and Electronics Engineering) |             |                           |                       |   |     |                |                       |     |                 |         |
|-----------------------------------------------|-------------|---------------------------|-----------------------|---|-----|----------------|-----------------------|-----|-----------------|---------|
| S. No                                         | Course Code | Course Title              | Scheme of Instruction |   |     |                | Scheme of Examination |     |                 | Credits |
|                                               |             |                           | L                     | T | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration In Hrs |         |
| Theory Courses                                |             |                           |                       |   |     |                |                       |     |                 |         |
| 1                                             | PE5_EE      | Professional Elective – V | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 2                                             | PE5_EE      | Professional Elective –VI | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| 3                                             | OE6_EE      | Open Elective-III         | 3                     | - | -   | 3              | 30                    | 70  | 3               | 3       |
| Practical / Laboratory Courses                |             |                           |                       |   |     |                |                       |     |                 |         |
| 4                                             | PW703EE     | Project Work Phase – II   | -                     | - | 16  | 16             | 50                    | 100 | -               | 8       |
| Total                                         |             |                           | 09                    | - | 16  | 25             | 140                   | 310 | -               | 17      |

| <b>Professional Elective – V &amp; VI</b> |         |                                              |
|-------------------------------------------|---------|----------------------------------------------|
| 1                                         | PE511EE | AI Techniques in Electrical Engineering      |
| 2                                         | PE512EE | Advances in Power Electronics                |
| 3                                         | PE513EE | Grid Integration of Renewable Energy Systems |
| 4                                         | PE514EE | Smart Grid Technology                        |

| <b>Open Elective – III</b> |         |                                                                   |
|----------------------------|---------|-------------------------------------------------------------------|
| 1                          | OE605EE | Smart Building Systems (Not for EEE & EIE Students)               |
| 2                          | OE606EE | Programmable Logic Controllers (Not for EEE & EIE Students)       |
| 3                          | OE631AE | Automotive Maintenance (Not for Mech./Prod./Auto. Engg. students) |
| 4                          | OE631ME | Mechatronics (Not for Mech./Prod./Auto. Engg. students)           |
| 5                          | OE603CE | Road Safety Engineering (Not for Civil Engg. Students)            |
| 6                          | OE604IT | Software Engineering (Not for IT Students)                        |

HS: Humanities and Social Sciences    BS: Basic Science    ES: Engineering Science  
 MC: Mandatory Course    PC: Professional Core    PE: Professional Elective  
 L: Lecture    T: Tutorial    P: Practical    D: Drawing  
 CIE: Continuous Internal Evaluation    SEE: Semester End Evaluation (Univ. Exam)    EE: Electrical Engg.

**Note:**

- Each contact hour is a clock hour.
- The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
 Head of Department  
 Department of EEE  
 Methodist College of Engg & Tech.  
 Abids, Hyderabad-500 001.



B.E. (Mechanical Engineering)

SEMESTER - III

| S. No.                 | Code No.  | Subject                                              | Scheme of Instruction |   |     |                 | Scheme of Evaluation |      | Credits |
|------------------------|-----------|------------------------------------------------------|-----------------------|---|-----|-----------------|----------------------|------|---------|
|                        |           |                                                      | L                     | T | P/D | Duration in Hrs | CE                   | SEE  |         |
| Theory Courses         |           |                                                      |                       |   |     |                 |                      |      |         |
| 1                      | GES303HS  | Numerical Methods and Partial Differential Equations | 3                     | 1 | -   | 4               | 40                   | 60   | 4       |
| 2                      | GES303HS  | Human Value and Professional Ethics                  | 2                     | - | -   | 2               | 40                   | 60   | 2       |
| 3                      | GES301CS  | Programming for Problem Solving                      | 3                     | - | -   | 3               | 40                   | 60   | 3       |
| 4                      | GPC301ME  | Thermodynamics                                       | 3                     | - | -   | 3               | 40                   | 60   | 3       |
| 5                      | GPC302ME  | Strength of Materials                                | 3                     | - | -   | 3               | 40                   | 60   | 3       |
| 6                      | GPC303ME  | Metallurgy & Material Science                        | 3                     | - | -   | 3               | 40                   | 60   | 3       |
| Practical / Laboratory |           |                                                      |                       |   |     |                 |                      |      |         |
| 7                      | GES351CS  | Programming for Problem Solving Lab                  | -                     | - | 2   | 2               | 40                   | 60   | 1       |
| 8                      | GPC351ME  | Metallurgy and Material Testing Lab                  | -                     | - | 3   | 3               | 40                   | 60   | 1.5     |
| 9                      | GPC352ME  | Computer Aided Machine Drawing                       | -                     | - | 3   | 3               | 40                   | 60   | 1.5     |
| 10                     | GMCC351ME | Solid Edge Certification Course                      | -                     | - | 2   | 2               | 50                   | *S/U | -       |
| Total                  |           |                                                      | 17                    | 1 | 10  | 28              | 410                  | 540  | 22      |

\*S=Satisfactory, U= Unsatisfactory

B.E. (Mechanical Engineering)

SEMESTER - IV

| S. No. | Code No.  | Subject                                  | Scheme of Instruction |   |     |                 | Scheme of Evaluation |     | Credits |
|--------|-----------|------------------------------------------|-----------------------|---|-----|-----------------|----------------------|-----|---------|
|        |           |                                          | L                     | T | P/D | Duration in Hrs | CE                   | SEE |         |
| 1      | GES403CS  | Python Programming                       | 3                     | - | -   | 3               | 40                   | 60  | 3       |
| 2      | GPC404ME  | Applied Thermodynamics                   | 3                     | 1 | -   | 4               | 40                   | 60  | 4       |
| 3      | GPC405ME  | Manufacturing Processes                  | 3                     | - | -   | 3               | 40                   | 60  | 3       |
| 4      | GPC406ME  | Fluid Mechanics & Hydraulic Machines     | 3                     | - | -   | 3               | 40                   | 60  | 3       |
| 5      | GPC407ME  | Kinematics of Machines                   | 3                     | 1 | -   | 4               | 40                   | 60  | 4       |
| 6      | GMCC402HS | Essence of Indian Traditional Knowledge  | 2                     | - | -   | 2               | 40                   | 60  | -       |
| 7      | GES453CS  | Python Programming Lab                   | -                     | - | 2   | 2               | 40                   | 60  | 1       |
| 8      | GPC453ME  | Applied Thermodynamics Lab               | -                     | - | 2   | 2               | 40                   | 60  | 1       |
| 9      | GPC454ME  | Manufacturing Processes Lab              | -                     | - | 2   | 2               | 40                   | 60  | 1       |
| 10     | GPC455ME  | Fluid Mechanics & Hydraulic Machines Lab | -                     | - | 2   | 2               | 40                   | 60  | 1       |
| Total  |           |                                          | 17                    | 2 | 8   | 27              | 400                  | 600 | 21      |

\*S=Satisfactory, U= Unsatisfactory

Note : The students have to undergo an Internship of two weeks' duration after IV semester and credits will be awarded in V semester after evaluation.

H.O.D.

*Anurag*

Mechanical Engineering Department  
Methodist College of Engg & Tech  
King Koll, Hyderabad-500 001.

SEMESTER-V

| S. No.                      | Code No. | Subject                                              | Scheme of Instruction |          |          |                         | Scheme of Evaluation |            | Credits      |
|-----------------------------|----------|------------------------------------------------------|-----------------------|----------|----------|-------------------------|----------------------|------------|--------------|
|                             |          |                                                      | L                     | T        | P/D      | Dura-<br>tion in<br>Hrs | CE                   | SEE        | Cre-<br>dits |
| <b>Theory Courses</b>       |          |                                                      |                       |          |          |                         |                      |            |              |
| 1                           | 6HNS03HS | Managerial Economics and Financial Accounting (MEFA) | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 2                           | 6HNS03HS | Effective Technical Communication                    | 2                     | -        | -        | 2                       | 40                   | 60         | 2            |
| 3                           | 6PCS08ME | Computer Aided Design & Manufacturing                | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 4                           | 6PCS09ME | Design of Machine Elements I                         | 3                     | 1        | -        | 4                       | 40                   | 60         | 4            |
| 5                           | 6PCS10ME | Metrology and Machine Tools                          | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 6                           | PE       | Professional Elective I/MOOC's                       | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 7                           | OE       | Open Elective I**                                    | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| <b>Practical/Laboratory</b> |          |                                                      |                       |          |          |                         |                      |            |              |
| 8                           | 6PCS56ME | Metrology and Machine Tools Lab                      | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| 9                           | 6PCS57ME | CAD/CAM Lab                                          | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| 10                          | 6PWS51ME | Internship-I                                         | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| 11                          | 6MCS52ME | Skill Development Lab-2 /Value Added Course          | -                     | -        | 2        | 2                       | 50                   | *SAU       | -            |
| <b>Total</b>                |          |                                                      | <b>20</b>             | <b>1</b> | <b>8</b> | <b>29</b>               | <b>450</b>           | <b>600</b> | <b>24</b>    |

**Professional Elective I :**

- 6PE501ME Automobile Engineering
- 6PE502ME Experimental Stress Analysis
- 6PE503ME Modern Machining & Forming Methods
- 6PE504ME Advances in Welding and Joining (MOOC's-2C)

\*\*O.E.I → 1.60E501ME Start-up Entrepreneurship.

\*\* Subject is not offered to the students of Mech. Engg. Department.

SEMESTER-VI

| S. No.                      | Code No.  | Subject                           | Scheme of Instruction |          |          |                         | Scheme of Evaluation |            | Credits      |
|-----------------------------|-----------|-----------------------------------|-----------------------|----------|----------|-------------------------|----------------------|------------|--------------|
|                             |           |                                   | L                     | T        | P/D      | Dura-<br>tion in<br>Hrs | CE                   | SEE        | Cre-<br>dits |
| <b>Theory Courses</b>       |           |                                   |                       |          |          |                         |                      |            |              |
| 1                           | 6PC611ME  | Dynamics of Machines              | 3                     | 1        | -        | 4                       | 40                   | 60         | 4            |
| 2                           | 6PC612ME  | Heat Transfer                     | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 3                           | 6PC613ME  | Design of Machine Elements-II     | 3                     | 1        | -        | 4                       | 40                   | 60         | 4            |
| 4                           | OE        | Open Elective II**                | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 5                           | PE        | Professional Elective II /MOOC's  | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 6                           | PE        | Professional Elective III /MOOC's | 3                     | -        | -        | 3                       | 40                   | 60         | 3            |
| 7                           | 6MCS603HS | Indian Constitution               | 2                     | -        | -        | 2                       | 40                   | 60         | -            |
| <b>Practical/Laboratory</b> |           |                                   |                       |          |          |                         |                      |            |              |
| 8                           | 6HCS63HS  | Soft Skills Lab                   | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| 9                           | 6PC658ME  | Theory of Machines Lab            | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| 10                          | 6PC659ME  | Heat Transfer Lab                 | -                     | -        | 2        | 2                       | 40                   | 60         | 1            |
| <b>Total</b>                |           |                                   | <b>20</b>             | <b>2</b> | <b>6</b> | <b>28</b>               | <b>400</b>           | <b>600</b> | <b>23</b>    |

**O.E.II → 1.60E602ME 3D Printing Technologies**

\*\* Subject is not offered to the students of Mech. Engg. Department

**PE.II →**

- 6PE605ME Power Plant Engineering (MOOC's-2C)
- 6PE606ME Industrial Tribology
- 6PE607ME Introduction to Composites (MOOC's-3C)
- 6PE608ME Entrepreneurship (MOOC's-3C)

**PE.III →**

- 6PE609ME Turbo Machinery
- 6PE610ME Introduction to Mechanical Vibrations (MOOC's-2C)
- 6PE611ME Fundamentals of Additive Manufacturing Technologies (MOOC's-3C)
- 6PE612ME Industrial Engineering.

Note : Students have to undergo summer Internship of 4 weeks at the end of semester VI and credits.



## SCHEME OF INSTRUCTION &amp; EXAMINATION

## AICTE Model Curriculum

## B. E. VII – Semester (MECHANICAL ENGINEERING)

| B. E. VII – Semester (MECHANICAL ENGINEERING) |            |                                  |                        |   |     |                    |                       |     |                   |         |
|-----------------------------------------------|------------|----------------------------------|------------------------|---|-----|--------------------|-----------------------|-----|-------------------|---------|
| S. No.                                        | CourseCode | Course Title                     | Scheme of Instructions |   |     |                    | Scheme of Examination |     |                   | Credits |
|                                               |            |                                  | L                      | T | P/D | Contact Hours/Week | CIE                   | SEE | Duration In Hours |         |
| Theory Course                                 |            |                                  |                        |   |     |                    |                       |     |                   |         |
| 1                                             | HS104ME    | Operations Research              | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 2                                             | PC416ME    | Automation InManufacturing       | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 3                                             | PC417ME    | Refrigeration & Air Conditioning | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 4                                             | PE54ME     | Professional Elective-IV         | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 5                                             | PE55ME     | Professional Elective-V          | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 6                                             | OE704ME    | Open Elective-II                 | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| Practical / Laboratory Course                 |            |                                  |                        |   |     |                    |                       |     |                   |         |
| 7                                             | PC460ME    | CAM and Automation Lab           | -                      | - | 2   | 2                  | 25                    | 50  | 3                 | 1       |
| 8                                             | PW702ME    | Project -I                       | -                      | - | 6   | 6                  | 50                    |     |                   | 3       |
| Total                                         |            |                                  |                        |   |     |                    |                       |     |                   | 22      |

| Professional Elective-IV |             |                        | Professional Elective-V |             |                          |
|--------------------------|-------------|------------------------|-------------------------|-------------|--------------------------|
| S.No.                    | Course Code | Course Title           | S. No.                  | Course Code | Course Title             |
| 1                        | PE541ME     | 3D Printing Technology | 1                       | PE551ME     | Non-Destructive Testing  |
| 2                        | PE542ME     | Robotics Engineering   | 2                       | PE552ME     | Mechanical Vibrations    |
| 3                        | PE543ME     | Tool Design            | 3                       | PE553ME     | Total Quality Management |

| Open Elective-II |             |                                                                  |
|------------------|-------------|------------------------------------------------------------------|
| S.No.            | Course Code | Course Title                                                     |
| 1                | OE704ME     | Entrepreneurship (Not for Mech./Prod./Automobile Engg. students) |

MC: Mandatory Course

L: Lecture

T: Tutorial

CIE: Continuous Internal Evaluation

BS: Basic Science

P: Practical

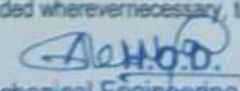
ES: Engineering Science

D: Drawing

SEE: Semester End Examination (Univ. Exam)

Note:

- Each contact hour is a clock hour
- The duration of the practical class is two hours, however it can be extended where necessary, to enable the student to complete the experiment.

  
 Mechanical Engineering Department  
 Methodist College of Engg & Tech  
 King Koti, Hyderabad-500 001.

SCHEME OF INSTRUCTION & EXAMINATION  
AICTE Model Curriculum  
B. E. VIII – Semester (MECHANICAL ENGINEERING)

| S. No                         | Course Code | Course Title             | Scheme of Instructions |   |     |                    | Scheme of Examination |     |                   | Credits |
|-------------------------------|-------------|--------------------------|------------------------|---|-----|--------------------|-----------------------|-----|-------------------|---------|
|                               |             |                          | L                      | T | P/D | Contact Hours/Week | CIE                   | SEE | Duration In Hours |         |
| Theory Course                 |             |                          |                        |   |     |                    |                       |     |                   |         |
| 1                             | PE56ME      | Professional Elective-VI | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| 2                             | OE804ME     | Open Elective-III        | 3                      | - | -   | 3                  | 30                    | 70  | 3                 | 3       |
| Practical / Laboratory Course |             |                          |                        |   |     |                    |                       |     |                   |         |
| 3                             | PW703ME     | Project-II               | -                      | - | 16  | 16                 | 50                    | 150 |                   | 8       |
| Total                         |             |                          |                        |   |     |                    |                       |     |                   | 14      |

| Professional Elective-VI |             |                                  |
|--------------------------|-------------|----------------------------------|
| S.No.                    | Course Code | Course Title                     |
| 1                        | PE561ME     | Energy Conservation & Management |
| 2                        | PE562ME     | Entrepreneurship Development     |
| 3                        | PE563ME     | Control Systems Theory           |
| 4                        | PE564ME     | Cryogenics                       |

| Open Elective-III |             |                                                              |
|-------------------|-------------|--------------------------------------------------------------|
| S. No.            | Course Code | Course Title                                                 |
| 1.                | OE804ME     | Mechatronics (Not for Mech./Prod./Automobile Engg. students) |

MC: Mandatory Course

L: Lecture

CIE: Continuous Internal Evaluation

T: Tutorial

BS: Basic Science

P: Practical

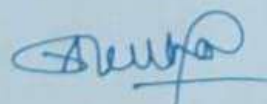
SEE: Semester End Examination (Univ. Exam)

ES: Engineering Science

D: Drawing

## Note:

- Each contact hour is a clock hour
- The duration of the practical class is two hours, however it can be extended where necessary, to enable the student to complete the experiment.



H.O.D.

Mechanical Engineering Department  
Methodist College of Engg & Tech  
Singh Koti, Hyderabad-500 001.



**Scheme of Instruction & Examination**  
**B.E. I – SEMESTER**  
**CIVIL ENGINEERING**

|                |             | Semester - I                  |                       |   |     |                 |                       |     |      | Credits |
|----------------|-------------|-------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|------|---------|
| S. No          | Course Code | Course Title                  | Scheme of Instruction |   |     |                 | Scheme of Examination |     |      |         |
|                |             |                               | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |      |         |
|                |             |                               | L                     | T | P/D |                 | CIE                   | SEE |      |         |
|                |             |                               |                       |   |     |                 |                       |     |      |         |
| Theory Courses |             |                               |                       |   |     |                 |                       |     |      |         |
| 1              | 2BS101 HS   | Engineering Mathematics - I   | 3                     | 1 | 0   | 4               | 40                    | 60  | 4    |         |
| 2              | 2BS107 HS   | Engineering Chemistry         | 3                     | 1 | 0   | 4               | 40                    | 60  | 4    |         |
| 3              | 2HS101 HS   | English                       | 2                     | 0 | 0   | 2               | 40                    | 60  | 2    |         |
| 4              | 2ES101CE    | Engineering Mechanics-I       | 3                     | 0 | 0   | 3               | 40                    | 60  | 3    |         |
| Laboratories   |             |                               |                       |   |     |                 |                       |     |      |         |
| 5              | 2BS154 HS   | Engineering Chemistry Lab     | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5  |         |
| 6              | 2HS151 HS   | English Lab                   | 0                     | 0 | 2   | 2               | 40                    | 60  | 1    |         |
| 7              | 2ES152 ME   | Engineering Workshop Practice | 0                     | 0 | 4   | 4               | 40                    | 60  | 2    |         |
| 8              | 2C151SP     | Yoga/NSS/Sports               | 0                     | 0 | 2   | 2               | 50                    | -   | 0    |         |
|                |             |                               | 11                    | 2 | 11  | 24              | 330                   | 420 | 17.5 |         |

:::

*[Signature]*  
**Head of the Department**  
**Department of H & S**  
**Methodist College of Engg. & Tech.**  
**Abids, Hyderabad-500 001**

| Semester - II  |             |                                                        |                       |   |     |                 |                       |     |      | Credits |
|----------------|-------------|--------------------------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|------|---------|
| S. No          | Course Code | Course Title                                           | Scheme of Instruction |   |     |                 | Scheme of Examination |     |      |         |
|                |             |                                                        | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |      |         |
|                |             |                                                        | L                     | T | P/D |                 | CIE                   | SEE |      |         |
|                |             |                                                        |                       |   |     |                 |                       |     |      |         |
| Theory Courses |             |                                                        |                       |   |     |                 |                       |     |      |         |
| 1              | 2BS202 HS   | Engineering Mathematics - II                           | 3                     | 1 | 0   | 4               | 40                    | 60  | 4    |         |
| 2              | 2BS205 HS   | Engineering Physics                                    | 3                     | 1 | 0   | 4               | 40                    | 60  | 4    |         |
| 3              | 2ES202 CE   | Engineering Mechanics –II                              | 2                     | 0 | 0   | 2               | 40                    | 60  | 3    |         |
| 4              | 2ES202 EE   | Elements of Electrical and Electronics Engineering     | 3                     | 0 | 0   | 3               | 40                    | 60  | 3    |         |
| 5              | 2MC20 ICE   | Environmental Science                                  | 2                     | 0 | 0   | 2               | 40                    | 60  | 0    |         |
| Laboratories   |             |                                                        |                       |   |     |                 |                       |     |      |         |
| 6              | 2BS252 HS   | Engineering Physics Lab                                | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5  |         |
| 7              | 2ES252 EE   | Elements of Electrical and Electronics Engineering Lab | 0                     | 0 | 2   | 2               | 40                    | 60  | 1    |         |
| 8              | 2ES251 CE   | Engineering Graphics Lab                               | 1                     | 0 | 4   | 5               | 40                    | 60  | 3    |         |
|                |             |                                                        | 15                    | 2 | 9   | 26              | 320                   | 480 | 19.5 |         |

BS: Basic Sciences  
Humanities and Sciences

ES: Engineering Sciences

HS:

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T : Tutorials P: Practicals D : Drawing

Note: 1). Each Contact Hour is a Clock hour

::2::

*Anusha*  
Head of the Department  
Department of H & S  
Methodist College of Engg. & Tech,  
Abids, Hyderabad-500 001



**Scheme of Instruction & Examination**  
**B.E. FIRST YEAR**  
**ELECTRONICS AND COMMUNICATION ENGINEERING**

| Semester - I   |             |                                    |                       |   |     |                 |                       |     |         |
|----------------|-------------|------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
| S. No          | Course Code | Course Title                       | Scheme of Instruction |   |     |                 | Scheme of Examination |     | Credits |
|                |             |                                    | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |         |
|                |             |                                    | L                     | T | P/D |                 | CIE                   | SEE |         |
|                |             |                                    |                       |   |     |                 |                       |     |         |
| Theory Courses |             |                                    |                       |   |     |                 |                       |     |         |
| 1              | 5BS101HS    | Engineering Mathematics - I        | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 2              | 5BS106HS    | Chemistry                          | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 3              | 5HS101HS    | English                            | 2                     | 0 | 0   | 2               | 40                    | 60  | 2       |
| 4              | 5ES103ME    | Elements of Mechanical Engineering | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| Laboratories   |             |                                    |                       |   |     |                 |                       |     |         |
| 5              | 5BS153HS    | Chemistry Lab                      | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 6              | 5HS151HS    | English Lab                        | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 7              | 5ES152ME    | Engineering Workshop Practice      | 0                     | 0 | 4   | 4               | 40                    | 60  | 2       |
| 8              | 5MC151SP    | Yoga/NSS/Sports                    | 0                     | 0 | 2   | 2               | 50                    | -   | 0       |
|                |             | Total                              | 11                    | 2 | 11  | 24              | 330                   | 420 | 17.5    |

::1::

*Anusha*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001

| S<br>N<br>o    | Semester - II  |                                        |                          |   |     |                                                               |                  |     | Credit<br>s |
|----------------|----------------|----------------------------------------|--------------------------|---|-----|---------------------------------------------------------------|------------------|-----|-------------|
|                | Course<br>Code | Course Title                           | Scheme of<br>Instruction |   |     | Scheme of<br>Examination                                      |                  |     |             |
|                |                |                                        | Hours Per<br>week        |   |     | D<br>u<br>r<br>a<br>t<br>i<br>o<br>n<br>i<br>n<br>H<br>r<br>s | Maximum<br>Marks |     |             |
|                |                |                                        | L                        | T | P/D |                                                               | CIE              | SEE |             |
| Theory Courses |                |                                        |                          |   |     |                                                               |                  |     |             |
| 1              | 5BS203HS       | Engineering Mathematics - II           | 3                        | 1 | 0   | 4                                                             | 40               | 60  | 4           |
| 2              | 5BS204HS       | Applied Physics                        | 3                        | 1 | 0   | 4                                                             | 40               | 60  | 4           |
| 3              | 5ES201CS       | Programming for Problem Solving        | 3                        | 0 | 0   | 3                                                             | 40               | 60  | 3           |
| 4              | 5ES202EE       | Elements of Electrical Engineering     | 3                        | 0 | 0   | 3                                                             | 40               | 60  | 3           |
| 5              | 5MC201CE       | Environmental Science                  | 2                        | 0 | 0   | 2                                                             | 40               | 60  | 0           |
| Laboratories   |                |                                        |                          |   |     |                                                               |                  |     |             |
| 6              | 5BS252HS       | Applied Physics Lab                    | 0                        | 0 | 3   | 3                                                             | 40               | 60  | 1.5         |
| 7              | 5ES251CS       | Programming for Problem Solving Lab    | 0                        | 0 | 2   | 2                                                             | 40               | 60  | 1           |
| 8              | 5ES252EE       | Elements of Electrical Engineering Lab | 0                        | 0 | 2   | 2                                                             | 40               | 60  | 1           |
| 9              | 5ES252CE       | Engineering Graphics Lab               | 1                        | 0 | 4   | 5                                                             | 40               | 60  | 3           |
|                |                | Total                                  | 15                       | 2 | 9   | 26                                                            | 320              | 480 | 20.5        |

BS: Basic Sciences  
Humanities and Sciences

ES: Engineering Sciences

HS:

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T: Tutorials P: Practicals D: Drawing

Note: 1). Each Contact Hour is a Clock hour

::2::

*Amudha*  
Head of the Department  
Department of H & S  
Methodist College of Engg. & Tech.  
Abids, Hyderabad-500 001



**Scheme of Instruction & Examination**  
**B.E. FIRST YEAR**  
**ELECTRICAL AND ELECTRONICS ENGINEERING**

| Semester - I   |             |                               |                       |   |     |                 |                       |     |         |
|----------------|-------------|-------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
| S. No          | Course Code | Course Title                  | Scheme of Instruction |   |     |                 | Scheme of Examination |     | Credits |
|                |             |                               | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |         |
|                |             |                               | L                     | T | P/D |                 | CIE                   | SEE |         |
|                |             |                               |                       |   |     |                 |                       |     |         |
| Theory Courses |             |                               |                       |   |     |                 |                       |     |         |
| 1              | 4BS101 HS   | Engineering Mathematics - I   | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 2              | 4BS106 HS   | Chemistry                     | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 3              | 4HS101 HS   | English                       | 2                     | 0 | 0   | 2               | 40                    | 60  | 2       |
| 4              | 4ES103 CE   | Engineering Mechanics         | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| Laboratories   |             |                               |                       |   |     |                 |                       |     |         |
| 5              | 4BS153 HS   | Chemistry Lab                 | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 6              | 4HS151 HS   | English Lab                   | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 7              | 4ES152 ME   | Engineering Workshop Practice | 0                     | 0 | 4   | 4               | 40                    | 60  | 2       |
| 8              | 4MC15 ISP   | Yoga/NSS/Sports               | 0                     | 0 | 2   | 2               | 50                    | -   | 0       |
|                |             | Total                         | 11                    | 2 | 11  | 24              | 330                   | 420 | 17.5    |

::1::

*Anusha*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001

|                |                | Semester - II                                        |                          |   |     |                                       |                          |     | Credits |
|----------------|----------------|------------------------------------------------------|--------------------------|---|-----|---------------------------------------|--------------------------|-----|---------|
| S<br>N<br>o    | Course<br>Code | Course Title                                         | Scheme of<br>Instruction |   |     |                                       | Scheme of<br>Examination |     |         |
|                |                |                                                      | Hours Per<br>week        |   |     | D<br>ur<br>ati<br>on<br>in<br>H<br>rs | Maximum<br>Marks         |     |         |
|                |                |                                                      | L                        | T | P/D |                                       | CIE                      | SEE |         |
| Theory Courses |                |                                                      |                          |   |     |                                       |                          |     |         |
| 1              | 4BS202HS       | Engineering Mathematics - II                         | 3                        | 1 | 0   | 4                                     | 40                       | 60  | 4       |
| 2              | 4BS204HS       | Applied Physics                                      | 3                        | 1 | 0   | 4                                     | 40                       | 60  | 4       |
| 3              | 4ES203EE       | Principles of Electrical and Electronics Engineering | 3                        | 0 | 0   | 3                                     | 40                       | 60  | 3       |
| 4              | 4ES204ME       | Principles of Mechanical Engineering                 | 3                        | 0 | 0   | 3                                     | 40                       | 60  | 3       |
| 5              | 4MC201CE       | Environmental Science                                | 2                        | 0 | 0   | 2                                     | 40                       | 60  | 0       |
| Laboratories   |                |                                                      |                          |   |     |                                       |                          |     |         |
| 6              | 4BS251HS       | Applied Physics Lab                                  | 0                        | 0 | 3   | 3                                     | 40                       | 60  | 1.5     |
| 7              | 4ES253ME       | Principles of Mechanical Engineering Lab             | 0                        | 0 | 2   | 2                                     | 40                       | 60  | 1       |
| 8              | 4ES252CE       | Engineering Graphics Lab                             | 1                        | 0 | 4   | 5                                     | 40                       | 60  | 3       |
|                |                | Total                                                | 15                       | 2 | 9   | 26                                    | 320                      | 480 | 19.5    |

BS: Basic Sciences  
Humanities and Sciences

ES: Engineering Sciences

HS:

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T: Tutorials P: Practicals D: Drawing

Note: 1). Each Contact Hour is a Clock hour

*Anusha*  
Head of the Department  
Department of H & S  
Methodist College of Engg. & Tech.  
Abids, Hyderabad-500 001

**Scheme of Instruction & Examination**  
**B.E. I – SEMESTER**  
**Mechanical Engineering**

| Semester - I   |             |                               |                       |   |     |                 |                       |     |         |
|----------------|-------------|-------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
| S. No          | Course Code | Course Title                  | Scheme of Instruction |   |     |                 | Scheme of Examination |     | Credits |
|                |             |                               | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |         |
|                |             |                               | L                     | T | P/D |                 | CIE                   | SEE |         |
| Theory Courses |             |                               |                       |   |     |                 |                       |     |         |
| 1              | 6BS101HS    | Engineering Mathematics - I   | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 2              | 6BS107HS    | Engineering Chemistry         | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 3              | 6HS101HS    | English                       | 2                     | 0 | 0   | 2               | 40                    | 60  | 2       |
| 4              | 6ES101ME    | Engineering Mechanics-I       | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| Laboratories   |             |                               |                       |   |     |                 |                       |     |         |
| 5              | 6BS154HS    | Engineering Chemistry Lab     | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 6              | 6HS151HS    | English Lab                   | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 7              | 6ES152ME    | Engineering Workshop Practice | 0                     | 0 | 4   | 4               | 40                    | 60  | 2       |
| 8              | 6C151SP     | Yoga/NSS/Sports               | 0                     | 0 | 2   | 2               | 50                    | -   | 0       |
| Total          |             |                               | 11                    | 2 | 11  | 24              | 330                   | 420 | 17.5    |

BS: Basic Sciences

ES: Engineering Sciences

HS: Humanities and Sciences

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T: Tutorials P: Practicals D: Drawing

Note: Each Contact Hour is a Clock hour

::1::

*Anurag*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001



| Semester - II  |             |                                                        |                       |   |     |                 |                       |     |         |
|----------------|-------------|--------------------------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|---------|
| S. No          | Course Code | Course Title                                           | Scheme of Instruction |   |     |                 | Scheme of Examination |     | Credits |
|                |             |                                                        | Hours Per week        |   |     | Duration in Hrs | Maximum Marks         |     |         |
|                |             |                                                        | L                     | T | P/D |                 | CIE                   | SEE |         |
| Theory Courses |             |                                                        |                       |   |     |                 |                       |     |         |
| 1              | 6BS202HS    | Engineering Mathematics - II                           | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 2              | 6BS205HS    | Engineering Physics                                    | 3                     | 1 | 0   | 4               | 40                    | 60  | 4       |
| 3              | 6ES202ME    | Engineering Mechanics –II                              | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 4              | 6ES202EE    | Elements of Electrical and Electronics Engineering     | 3                     | 0 | 0   | 3               | 40                    | 60  | 3       |
| 5              | 6MC201CE    | Environmental Science                                  | 2                     | 0 | 0   | 2               | 40                    | 60  | 0       |
| Laboratories   |             |                                                        |                       |   |     |                 |                       |     |         |
| 6              | 6BS252HS    | Engineering Physics Lab                                | 0                     | 0 | 3   | 3               | 40                    | 60  | 1.5     |
| 7              | 6ES252EE    | Elements of Electrical and Electronics Engineering Lab | 0                     | 0 | 2   | 2               | 40                    | 60  | 1       |
| 8              | 6ES251ME    | Engineering Graphics Lab                               | 1                     | 0 | 4   | 5               | 40                    | 60  | 3       |
| Total          |             |                                                        | 15                    | 2 | 9   | 26              | 320                   | 480 | 19.5    |

BS: Basic Sciences

ES: Engineering Sciences

HS: Humanities and Sciences

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T: Tutorials P: Practicals D: Drawing

Note: Each Contact Hour is a Clock hour

*Anusha*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001

## Scheme of Instruction &amp; Examination

## B.E. I – YEAR

(Common for CSE &amp; AI&amp;DS)

| Semester - I   |                |                                                        |                          |   |     |                                   |                              |         |      | Credits |
|----------------|----------------|--------------------------------------------------------|--------------------------|---|-----|-----------------------------------|------------------------------|---------|------|---------|
| S<br>N<br>o    | Course<br>Code | Course Title                                           | Scheme of<br>Instruction |   |     | Du<br>rati<br>on<br>in<br>Hr<br>s | Scheme of<br>Examinati<br>on |         |      |         |
|                |                |                                                        | Hours Per week           |   |     |                                   | Maximum<br>Marks             |         |      |         |
|                |                |                                                        | L                        | T | P/D |                                   | CIE                          | SE<br>E |      |         |
| Theory Courses |                |                                                        |                          |   |     |                                   |                              |         |      |         |
| 1              | BS101HS        | Engineering Mathematics - I                            | 3                        | 1 | 0   | 4                                 | 40                           | 60      | 4    |         |
| 2              | BS104HS        | Applied Physics                                        | 3                        | 1 | 0   | 4                                 | 40                           | 60      | 4    |         |
| 3              | ES101CS        | Programming for Problem Solving                        | 3                        | 0 | 0   | 3                                 | 40                           | 60      | 3    |         |
| 4              | ES102EE        | Elements of Electrical and Electronics Engineering     | 3                        | 0 | 0   | 3                                 | 40                           | 60      | 3    |         |
| 5              | MC101CE        | Environmental Science                                  | 2                        | 0 | 0   | 2                                 | 40                           | 60      | 0    |         |
| Laboratories   |                |                                                        |                          |   |     |                                   |                              |         |      |         |
| 6              | BS151HS        | Applied Physics Lab                                    | 0                        | 0 | 3   | 3                                 | 40                           | 60      | 1.5  |         |
| 7              | ES151CS        | Programming for Problem Solving Lab                    | 0                        | 0 | 2   | 2                                 | 40                           | 60      | 1    |         |
| 8              | ES152EE        | Elements of Electrical and Electronics Engineering Lab | 0                        | 0 | 2   | 2                                 | 40                           | 60      | 1    |         |
| 9              | ES152CE        | Engineering Graphics Lab                               | 1                        | 0 | 4   | 5                                 | 40                           | 60      | 3    |         |
|                |                | Total                                                  |                          |   |     |                                   |                              |         | 20.5 |         |

*Anusha*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001

| S<br>N<br>o    | Semester - II  |                               |                          |   |     |                                       |                  |         |      | Credit<br>s |
|----------------|----------------|-------------------------------|--------------------------|---|-----|---------------------------------------|------------------|---------|------|-------------|
|                | Course<br>Code | Course Title                  | Scheme of<br>Instruction |   |     | Scheme of<br>Examination              |                  |         |      |             |
|                |                |                               | Hours Per week           |   |     | D<br>ur<br>ati<br>on<br>in<br>Hr<br>s | Maximum<br>Marks |         |      |             |
|                |                |                               | L                        | T | P/D |                                       | CIE              | SE<br>E |      |             |
| Theory Courses |                |                               |                          |   |     |                                       |                  |         |      |             |
| 1              | BS202HS        | Engineering Mathematics – II  | 3                        | 1 | 0   | 4                                     | 40               | 60      | 4    |             |
| 2              | BS206HS        | Chemistry                     | 3                        | 1 | 0   | 4                                     | 40               | 60      | 4    |             |
| 3              | HS201HS        | English                       | 2                        | 0 | 0   | 2                                     | 40               | 60      | 2    |             |
| 4              | ES202CS        | Data Structures               | 3                        | 0 | 0   | 3                                     | 40               | 60      | 3    |             |
| Laboratories   |                |                               |                          |   |     |                                       |                  |         |      |             |
| 5              | BS253HS        | Chemistry Lab                 | 0                        | 0 | 3   | 3                                     | 40               | 60      | 1.5  |             |
| 6              | HS251HS        | English Lab                   | 0                        | 0 | 2   | 2                                     | 40               | 60      | 1    |             |
| 7              | ES252CS        | Data Structures lab           | 0                        | 0 | 2   | 2                                     | 40               | 60      | 1    |             |
| 8              | ES252ME        | Engineering Workshop Practice | 0                        | 0 | 1   | 4                                     | 40               | 60      | 2    |             |
| 9              | MC251SP        | Yoga/NSS/Sports               | 0                        | 0 | 2   | 2                                     | 50               | -       | 0    |             |
|                |                | Total Credits                 |                          |   |     |                                       |                  |         | 18.5 |             |

BS: Basic Sciences

ES: Engineering Sciences

HS: Humanities and Sciences

MC: Mandatory Courses

CIE: Continuous Internal Evaluation

SEE: Semester End Examination

L: Lectures T : Tutorials P: Practicals D : Drawing

Note: 1). Each Contact Hour is a Clock hour

*Anusha*  
 Head of the Department  
 Department of H & S  
 Methodist College of Engg. & Tech.  
 Abids, Hyderabad-500 001



**METHODIST****COLLEGE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi &amp; Affiliated to Osmania University

Accredited by NAAC with A+ and NBA for UG Courses

College Code: 1607

**SCHEME OF INSTRUCTION & EXAMINATION****M.E. (Mechanical Engineering) I – Semester****Specialization in CAD/CAM**

| S. No.                        | Course Type/Code   | Course Name |                                    | Scheme of Instruction |    |     |                | Scheme of Examination |     |                 | Credits |
|-------------------------------|--------------------|-------------|------------------------------------|-----------------------|----|-----|----------------|-----------------------|-----|-----------------|---------|
|                               |                    |             |                                    | L                     | T  | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Courses                |                    | Code        | Course Title                       |                       |    |     |                |                       |     |                 |         |
| 1                             | Program Core – I   | 6PC5101ME   | Finite Element Techniques          | 3                     | 1  | -   | 4              | 40                    | 60  | 3               | 4       |
| 2                             | Program Core – II  | 6PC5102ME   | Computer Integrated Manufacturing  | 3                     | -  | -   | 3              | 40                    | 60  | 3               | 3       |
| 3                             | Program Core – III | 6PC5103ME   | Computer Aided Modeling And Design | 3                     | -  | -   | 3              | 40                    | 60  | 3               | 3       |
| 4                             | Elective-I         | PE-I        | Professional Elective – I          | 3                     | -  | -   | 3              | 40                    | 60  | 3               | 3       |
| 5                             | MC                 | 6MC5101ME   | Engineering Research Methodology   | 3                     | -  | -   | 3              | 40                    | 60  | 3               | 3       |
| 6                             | Audit-I            | AD-I        | Audit Course – I                   | -                     | -  | 2   | 2              | 40                    | 60  | 2               | -       |
| Practical/ Laboratory Courses |                    |             |                                    |                       |    |     |                |                       |     |                 |         |
| 7                             | Lab-I              | 6PC5151CD   | Finite Element Techniques Lab      | -                     | -  | 2   | 2              | 40                    | 60  | 3               | 1       |
| 8                             | Seminar            | 6PC5154CD   | Seminar                            | -                     | -  | 2   | 2              | 50                    | -   | 2               | 1       |
| Total                         |                    |             |                                    | 15                    | 01 | 06  | 22             | 330                   | 420 | 22              | 18      |

PC: Program Core    PE: Professional Elective    OE: Open Elective    AD: Audit Course  
MC: Mandatory    HS: Humanities and social science Course

L: Lecture    T: Tutorial    P: Practical    D: Drawing  
CIE: Continuous Internal Evaluation    SEE: Semester End Examination

| Professional Elective-1 |             |                                                |
|-------------------------|-------------|------------------------------------------------|
| S. No.                  | Course Code | Course Title                                   |
| 1                       | 6PE5101ME   | Additive Manufacturing Design and Applications |
| 2                       | 6PE5102ME   | Advanced Metrology                             |
| 3                       | 6PE5103ME   | Failure Analysis and Design                    |
| 4                       | 6PE5104ME   | Design for Manufacture                         |

| Audit Course-I |             |                                    |
|----------------|-------------|------------------------------------|
| S. No.         | Course Code | Course Title                       |
| 1              | 6AD5101HS   | English for Research Paper Writing |
| 2              | 6AD5102CE   | Disaster Management                |
| 3              | 6AD5103HS   | Sanskrit for Technical Knowledge   |
| 4              | 6AD5104HS   | Value Education                    |

*(Signature)*  
H.O.D.  
Mechanical Engineering Department  
Methodist College of Engg & Te  
King Koti, Hyderabad-500 001



**METHODIST****COLLEGE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi &amp; Affiliated to Osmania University

Accredited by NAAC with A+ and NBA for UG Courses

College Code: 1607

**SCHEME OF INSTRUCTION & EXAMINATION****M.E. (Mechanical Engineering)****II Semester Specialization in  
CAD/CAM**

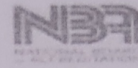
| CAD/CAM                       |                  |             |                              |   |     |                |                       |     |                 |         |    |    |
|-------------------------------|------------------|-------------|------------------------------|---|-----|----------------|-----------------------|-----|-----------------|---------|----|----|
| S. No.                        | Course Type/Code | Course Name | Scheme of Instruction        |   |     |                | Scheme of Examination |     |                 | Credits |    |    |
|                               |                  |             | L                            | T | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration in Hrs |         |    |    |
| Theory Courses                |                  | Code        | Course Title                 |   |     |                |                       |     |                 |         |    |    |
| 1                             | Program Core –IV | 6PC5204ME   | Advanced Material Technology |   | 3   | 1              | -                     | 4   | 40              | 60      | 3  | 4  |
| 2                             | Program Core – V | 6PC5205ME   | Automation                   |   | 3   | 1              | -                     | 4   | 40              | 60      | 3  | 4  |
| 3                             | Elective-II      | PE-II       | Professional Elective – II   |   | 3   | -              | -                     | 3   | 40              | 60      | 3  | 3  |
| 4                             | Open Elective    | OE-I        | Open Elective – I            |   | 3   | -              | -                     | 3   | 40              | 60      | 3  | 3  |
| 5                             | Audit-II         | AD-II       | Audit Course – II            |   | 2   | -              | -                     | 2   | 40              | 60      | 3  | -  |
| 6                             | Mini project     | 6PC5255ME   | Innovative Design Project    |   | -   | -              | 8                     | 8   | 50              | -       | 3  | 4  |
| Practical/ Laboratory Courses |                  |             |                              |   |     |                |                       |     |                 |         |    |    |
| 7                             | Lab-II           | 6PC5252CD   | Advanced CAD Lab             |   | -   | -              | 2                     | 2   | 40              | 60      | 3  | 1  |
| 8                             | Lab-III          | 6PC5253CD   | CAM &Automation Lab          |   | -   | -              | 2                     | 2   | 40              | 60      | 3  | 1  |
| Total                         |                  |             |                              |   | 14  | 02             | 12                    | 28  | 330             | 420     | 24 | 20 |

PC: Program Core PE: Professional Elective OE: Open Elective AD: Audit Course  
MC: Mandatory Course HS: Humanities and social science

L: Lecture T: Tutorial P: Practical D: Drawing  
CIE: Continuous Internal Evaluation SEE: Semester End Examination

| <b>Professional Elective-II</b> |             |                              |
|---------------------------------|-------------|------------------------------|
| S. No.                          | Course Code | Course Title                 |
| 1                               | 6PE5205ME   | Advanced Machine Design      |
| 2                               | 6PE5206ME   | Optimization Techniques      |
| 3                               | 6PE5207ME   | Computational Fluid dynamics |
| 4                               | 6PE5208ME   | Composite Materials          |



**METHODIST****COLLEGE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi &amp; Affiliated to Osmania University

Accredited by NAAC with A+ and NBA for UG Courses

College Code: 1607

| Open Elective-I |             |                                             |
|-----------------|-------------|---------------------------------------------|
| S. No.          | Course Code | Course Title                                |
| 1               | 6OE5201CE   | Cost Management of Engineering Projects     |
| 2               | 6OE5202CS   | Business Analytics                          |
| 3               | 6OE5203EC   | Fundamentals of Embedded Systems            |
| 4               | 6OE5204EE   | Waste to Energy                             |
| 5               | 6OE5205ME   | Intellectual Property Rights & Copy Writing |

| Audit Course-II |             |                                                           |
|-----------------|-------------|-----------------------------------------------------------|
| S. No.          | Course Code | Course Title                                              |
| 1               | 6AD5205HS   | Constitution of India and Fundamental Rights              |
| 2               | 6AD5206HS   | Pedagogy Studies                                          |
| 3               | 6AD5207HS   | Stress Management by Yoga                                 |
| 4               | 6AD5208HS   | Personality Development through life Enlightenment Skills |

**H.O.D.**

Mechanical Engineering Department  
Methodist College of Engg & Tech  
King Koti, Hyderabad-500 001.



**METHODIST****NBA****COLLEGE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi &amp; Affiliated to Osmania University

Accredited by NAAC with A+ and NBA for UG Courses

College Code:1607

**SCHEME OF INSTRUCTION & EXAMINATION****M.E. (Mechanical Engineering) III Semester****Specialization in CAD/CAM**

| S. No.         | Course Type/Code     | Course Name |                             | Scheme of Instruction |   |     |                | Scheme of Examination |     |                 | Credits |
|----------------|----------------------|-------------|-----------------------------|-----------------------|---|-----|----------------|-----------------------|-----|-----------------|---------|
|                |                      |             |                             | L                     | T | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Courses |                      | Code        | Course Title                |                       |   |     |                |                       |     |                 |         |
| 1              | Elective-III         | PE-III      | Professional Elective – III | 3                     | - | -   | 3              | 40                    | 60  | 3               | 3       |
| 2              | Elective-IV          | PE-IV       | Professional Elective – IV  | 3                     | - | -   | 3              | 40                    | 60  | 3               | 3       |
| 3              | Project Dissertation | 6PC5356ME   | Dissertation Phase – I      | -                     | - | 20  | 20             | 100                   | -   | 3               | 10      |
| Total          |                      |             |                             | 06                    | - | 20  | 26             | 180                   | 120 |                 | 16      |

| Professional Elective-III |             |                                        |
|---------------------------|-------------|----------------------------------------|
| S. No.                    | Course Code | Course Title                           |
| 1                         | 6PE5209ME   | Tribology                              |
| 2                         | 6PE5210ME   | Product Design & Process Planning      |
| 3                         | 6PE5211ME   | Non Destructive Testing and Evaluation |
| 4                         | 6PE5212ME   | Flexible Manufacturing Systems         |

| Professional Elective-IV |             |                                           |
|--------------------------|-------------|-------------------------------------------|
| S. No.                   | Course Code | Course Title                              |
| 1                        | 6PE5213ME   | Robotic Engineering                       |
| 2                        | 6PE5214ME   | Advanced Manufacturing Processes          |
| 3                        | 6PE5215ME   | Advanced Engineering Materials            |
| 4                        | 6PE5216ME   | Integrated Product Design And Development |

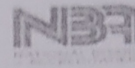
PC: Program Core    PE: Professional Elective    OE: Open Elective    AD: Audit Course  
MC: Mandatory Course    HS: Humanities and social science

L: Lecture    T: Tutorial    P: Practical    D: Drawing  
CIE: Continuous Internal Evaluation    SEE: Semester End Examination

**H.O.D.**

Mechanical Engineering Department  
Methodist College of Engg & Tech  
King Koti, Hyderabad-500 001



**METHODIST****COLLEGE OF ENGINEERING & TECHNOLOGY**

Approved by AICTE, New Delhi &amp; Affiliated to Osmania University

Accredited by NAAC with A+ and NBA for UG Courses

College Code: 1607

**SCHEME OF INSTRUCTION & EXAMINATION****M.E. (Mechanical Engineering)****IV Semester Specialization in****CAD/CAM**

| S. No.         | Course Type/Code | Course Name             | Scheme of Instruction |   |     |                | Scheme of Examination |     |                 | Credits |
|----------------|------------------|-------------------------|-----------------------|---|-----|----------------|-----------------------|-----|-----------------|---------|
|                |                  |                         | L                     | T | P/D | Contact Hrs/Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Courses |                  |                         |                       |   |     |                |                       |     |                 |         |
| 1              | 6PC5457ME        | Dissertation Phase – II | -                     | - | 28  | 28             | -                     | 200 | 3               | 14      |
| Total          |                  |                         | -                     | - | 28  | 28             | -                     | 200 |                 | 14      |

**PC:** Program Core    **PE:** Professional Elective    **OE:** Open Elective    **AD:** Audit Course**MC:** Mandatory Course    **HS:** Humanities and social science**L:** Lecture    **T:** Tutorial    **P:** Practical**D:** Drawing**CIE:** Continuous Internal Evaluation**SEE:** Semester End Examination

**H.O.D.**
**Mechanical Engineering Department**  
**Methodist College of Engg & Tech**  
**King Koti, Hyderabad-500 001,**



MCET (BE - ECE) Curriculum for M21 - Regulation

B.E. III Semester

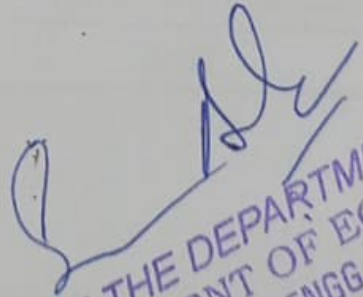
| S. No                       | Course Code | Course Title                                   | Scheme of Instruction |   |      |                      | Scheme of Examination |     |                       | Credits |
|-----------------------------|-------------|------------------------------------------------|-----------------------|---|------|----------------------|-----------------------|-----|-----------------------|---------|
|                             |             |                                                | L                     | T | P/ D | Contact Hrs per Week | CIE                   | SEE | SEE Duration in hours |         |
| Theory Courses              |             |                                                |                       |   |      |                      |                       |     |                       |         |
| 1                           | 5PC301EC    | Electronic Devices                             | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 2                           | 5PC302EC    | Signals and Systems                            | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 3                           | 5PC303EC    | Network Theory                                 | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 4                           | 5PC304EC    | Switching Theory and Logic Design              | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 5                           | 5ES303EC    | Probability Theory and Stochastic Processes    | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 6                           | 5HS302HS    | Managerial Economics and Financial Accountancy | 3                     | 0 | 0    | 3                    | 40                    | 60  |                       | 3       |
| 7                           | 5MC303HS    | Indian Constitution                            | 2                     | 0 | 0    | 2                    | 40                    | 60  |                       | 0       |
| 8                           | 5ES304EC    | Python Programming                             | 2                     | 0 | 0    | 2                    | 40                    | 60  |                       | 2       |
| Practical/Laboratory Course |             |                                                |                       |   |      |                      |                       |     |                       |         |
| 9                           | 5PC351EC    | Electronic Devices and Logic Design Lab        | 0                     | 0 | 2    | 2                    | 40                    | 60  |                       | 1       |
| 10                          | 5PC352EC    | Network Theory Lab                             | 0                     | 0 | 2    | 2                    | 40                    | 60  |                       | 1       |
| 11                          | 5ES353EC    | Python Programming Lab                         | 0                     | 0 | 2    | 2                    | 40                    | 60  |                       | 1       |
| Total                       |             |                                                | 22                    | 0 | 6    | 28                   | 440                   | 660 |                       | 23      |

  
 HEAD OF THE DEPARTMENT  
 DEPARTMENT OF ECE  
 METHODIST COLLEGE OF ENGG. & TECH.  
 ABIDS, HYDERABAD.

MCET (BE - ECE) Curriculum for M21 - Regulation

B.E.(ECE)-IV SEMESTER

| S. No         | Course Code | Course Title                                   | Scheme of Instruction |   |   |             | Scheme of Examination |     | Credits |
|---------------|-------------|------------------------------------------------|-----------------------|---|---|-------------|-----------------------|-----|---------|
|               |             |                                                | L                     | T | P | Total Hours | CIE                   | SEE |         |
| Theory        |             |                                                |                       |   |   |             |                       |     |         |
| 1             | 5PC405EC    | Analog Electronic Circuits                     | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 2             | 5PC406EC    | Automatic Control Systems                      | 3                     | 1 | 0 | 3           | 40                    | 60  | 4       |
| 3             | 5PC407EC    | Computer Organization and Architecture         | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 4             | 5PC408EC    | Electro Magnetic Theory and Transmission Lines | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 5             | 5PC409EC    | IC Applications                                | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 6             | 5MC402HS    | Essence of Indian Traditional Knowledge        | 2                     | 0 | 0 | 2           | 40                    | 60  | 0       |
| 7             | 5HS403HS    | Human Values and Professional Ethics           | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| Laboratories  |             |                                                |                       |   |   |             |                       |     |         |
| 8             | 5PC453EC    | AEC Laboratory                                 | 0                     | 0 | 2 | 2           | 40                    | 60  | 1       |
| 9             | 5PC454EC    | IC Applications Laboratory                     | 0                     | 0 | 2 | 2           | 40                    | 60  | 1       |
| Total Credits |             |                                                |                       |   |   |             |                       |     | 21      |

  
 HEAD OF THE DEPARTMENT  
 DEPARTMENT OF ECE  
 METHODIST COLLEGE OF ENGG. & TECH.  
 ABIDS, HYDERABAD.

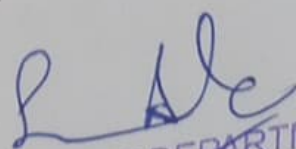


## B.E V- SEM ECE

| S. No                | Course Code | Course Title                      | Scheme of Instruction |   |   |             | Scheme of Examination |     | Credits   |
|----------------------|-------------|-----------------------------------|-----------------------|---|---|-------------|-----------------------|-----|-----------|
|                      |             |                                   | L                     | T | P | Total Hours | CIE                   | SEE |           |
| 1                    | 5PC510EC    | Microcontrollers                  | 3                     | 0 | 0 | 3           | 40                    | 60  | 3         |
| 2                    | 5PC511EC    | Digital Signal Processing         | 3                     | 0 | 0 | 3           | 40                    | 60  | 3         |
| 3                    | 5PC512EC    | Analog Communication              | 3                     | 0 | 0 | 3           | 40                    | 60  | 3         |
| 4                    | 5PE51XEC    | Professional Elective - I         | 3                     | 0 | 0 | 3           | 40                    | 60  | 3         |
| 5                    | XOE5XXXX    | Open Elective - I                 | 3                     | 0 | 0 | 3           | 40                    | 60  | 3         |
| 6                    | 5HS352HS    | Effective Technical Communication | 2                     | 0 | 0 | 2           | 40                    | 60  | 2         |
| 7                    | 5PC551EC    | Microcontrollers Lab              | 0                     | 0 | 2 | 2           | 40                    | 60  | 1         |
| 8                    | 5PC552EC    | Signals and Systems Lab           | 0                     | 0 | 2 | 2           | 40                    | 60  | 1         |
| 9                    | 5PW571EC    | Mini Project                      | 0                     | 0 | 2 | 2           | 40                    | 60  | 1         |
| <b>Total Credits</b> |             |                                   |                       |   |   |             |                       |     | <b>20</b> |

|                 |                                             |
|-----------------|---------------------------------------------|
| <b>5PE51XEC</b> | <b>Professional Elective-I</b>              |
| 1               | Electronics Measurement and Instrumentation |
| 2               | Scripting Languages                         |
| 3               | Real Time Operating Systems                 |
| 4               | Neural Networks                             |

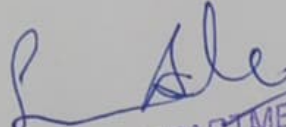
|                 |                                    |                   |
|-----------------|------------------------------------|-------------------|
| <b>XOE5XXXX</b> | <b>Open Elective - I</b>           | <b>Offered by</b> |
| 1               | Disaster Mitigation                | CIVIL             |
| 2               | Oops using JAVA                    | CSE               |
| 3               | Artificial Intelligence            | AI&DS             |
| 4               | Renewable Energy Systems           | EEE               |
| 5               | Basics of Electronic Communication | ECE               |
| 6               | Start up & Entrepreneurship        | MECH              |

  
 HEAD OF THE DEPARTMENT  
 DEPARTMENT OF ECE  
 METHODIST COLLEGE OF ENGG. & TECH.  
 ABIDS, HYDRABAD.

## B.E VI - SEM ECE

| S. No         | Course Category | Course Title                              | Scheme of Instruction |   |   |             | Scheme of Examination |     | Credits |
|---------------|-----------------|-------------------------------------------|-----------------------|---|---|-------------|-----------------------|-----|---------|
|               |                 |                                           | L                     | T | P | Total Hours | CIE                   | SEE |         |
| Theory        |                 |                                           |                       |   |   |             |                       |     |         |
| 1             | 5PC613EC        | Digital Communication                     | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 2             | 5PC614EC        | VLSI Design.                              | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 3             | 5PC615EC        | Antenna and Wave Propagation              | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 4             | 5PE62XEC        | Professional Elective – II                | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 5             | 5PE63XEC        | Professional Elective – III               | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| 6             | XOE6XXXX        | Open Elective - II                        | 3                     | 0 | 0 | 3           | 40                    | 60  | 3       |
| Laboratories  |                 |                                           |                       |   |   |             |                       |     |         |
| 7             | 5PC651EC        | Analog & Digital Communication Laboratory | 0                     | 0 | 2 | 2           | 40                    | 60  | 1       |
| 8             | 5PC652EC        | VLSI Design Lab                           | 0                     | 0 | 2 | 2           | 40                    | 60  | 1       |
| 9             | 5HS653HS        | Soft Skills Laboratory                    | 0                     | 0 | 2 | 2           | 40                    | 60  | 1       |
| 10            | 5PW672EC        | Technical seminar                         | 0                     | 0 | 2 | 2           | 50                    | -   | 1       |
| 11            | 5PW774EC        | Summer Internship (during summer break)   | -                     | - | - | -           | -                     | -   | *       |
| Total Credits |                 |                                           |                       |   |   |             |                       |     | 22      |

\*Note: Summer Internship to be conducted during summer break and evaluation will be in VII Sem.

  
 HEAD OF THE DEPARTMENT  
 DEPARTMENT OF ECE  
 METHODIST COLLEGE OF ENGG. & TECH.  
 ARIIS, HYDERABAD.

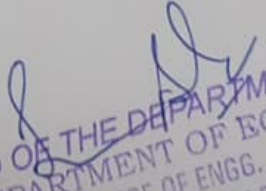


*MCET (BE - ECE) Curriculum for M21 - Regulation*

| <b>5PE62XEC</b> | <b>Professional Elective - II</b>  |
|-----------------|------------------------------------|
| 1               | Embedded System Design             |
| 2               | Data analytics using R-Programming |
| 3               | Digital Image processing           |
| 4               | CPLD/FPGA Architectures            |

| <b>5PE63XEC</b> | <b>Professional Elective-III</b>      |
|-----------------|---------------------------------------|
| 1               | Internet of Things                    |
| 2               | Cyber Security                        |
| 3               | Multirate Signal Processing           |
| 4               | Fundamentals of Electronics Packaging |

| <b>XOE6XXXX</b> | <b>Open Elective - II</b>   | <b>Offered by</b> |
|-----------------|-----------------------------|-------------------|
| 1               | Green Building Technologies | CIVIL             |
| 2               | Software Engineering        | CSE               |
| 3               | Deep Learning               | AI&DS             |
| 4               | Electric Vehicle Technology | EEE               |
| 5               | Fundamentals of IOT         | ECE               |
| 6               | 3D Printing Technologies    | MECH              |

  
**HEAD OF THE DEPARTMENT**  
**DEPARTMENT OF ECE**  
**METHODIST COLLEGE OF ENGG. & TECH.**  
**ANDHRA PRADESH**

**SCHEME OF INSTRUCTION & EXAMINATION****B.E. VII- Semester****(ELECTRONICS AND COMMUNICATION ENGINEERING)**

| S. No.                      | Course Code | Course Title                              | Scheme of Instruction |   |     |                 | Scheme of Examination |     |                 | Credits |
|-----------------------------|-------------|-------------------------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|-----------------|---------|
|                             |             |                                           | L                     | T | P/D | Contact Hrs /Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Course               |             |                                           |                       |   |     |                 |                       |     |                 |         |
| 1                           | PC416EC     | Microwave Theory and Techniques           | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| 2                           | PE5XXEC     | Professional Elective-III                 | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| 3                           | PE5XXEC     | Professional Elective-IV                  | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| 4                           | OE6XXYY     | Open Elective-II                          | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| Practical/Laboratory Course |             |                                           |                       |   |     |                 |                       |     |                 |         |
| 5                           | PC460EC     | Embedded systems and IoT applications lab | -                     | - | 2   | 2               | 25                    | 50  | 3               | 1       |
| 6                           | PC461EC     | Microwave Lab                             | -                     | - | 2   | 2               | 25                    | 50  | 3               | 1       |
| 7                           | PW702EC     | Summer Internship                         | -                     | - | -   | -               | 50                    | -   | -               | 2       |
| 8                           | PW703EC     | Major Project Phase-I                     | -                     | - | 2   | 2               | 50                    | -   | 3               | 2       |
| Total                       |             |                                           | 12                    | - | 6   | 18              | 270                   | 380 | 21              | 18      |

PC: Professional Core  
PW: Project Work

PE: Professional Elective

OE: Open Elective

L: Lecture  
CIE: Continuous Internal Evaluation

T: Tutorial

P: Practical

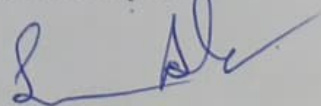
D: Drawing

SEE: Semester End Examination (Univ. Exam)

EC: Electronics and Communication Engineering

**Note:**

1. Each contact hour is a clock hour.
2. The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
METHODIST COLLEGE OF ENGG. & TECH.  
ABIDS, HYDERABAD.



| Professional Elective-III |             |                                                              |
|---------------------------|-------------|--------------------------------------------------------------|
| S. No.                    | Course Code | Course Title                                                 |
| 1                         | PE509EC     | Satellite Communication                                      |
| 2                         | PE510EC     | Embedded System Design                                       |
| 3                         | PE511EC     | Fundamentals of Artificial Intelligence and Machine Learning |
| 4                         | PE512EC     | Fuzzy Logic for Neural Network Applications                  |

| Professional Elective-IV |             |                                                |
|--------------------------|-------------|------------------------------------------------|
| S. No.                   | Course Code | Course Title                                   |
| 1.                       | PE513EC     | IC Verification using System Verilog           |
| 2                        | PE514EC     | Optical Fiber Communication                    |
| 3                        | PE515EC     | Cellular and Mobile Communications             |
| 4                        | PE516EC     | Electromagnetic Interference and Compatibility |
| 5                        | PE517EC     | Digital Signal Processors and Architecture     |

| Open Elective – II |             |                                                                                       |
|--------------------|-------------|---------------------------------------------------------------------------------------|
| S. No.             | Course Code | Course Title                                                                          |
| 1                  | OE701 EE    | Non- Conventional Energy Sources*                                                     |
| 2                  | OE702 EE    | Transducers and Sensors*                                                              |
| 3                  | OE703 AE    | Automotive Safety and Ergonomics*                                                     |
| 4                  | OE704 ME    | Entrepreneurship*                                                                     |
| 5                  | OE705 CE    | Principles of Green Buildings *                                                       |
| 6.                 | OE706 AS    | Data Mining *                                                                         |
| 7                  | OE707 CS    | Web Application Development*                                                          |
| 8                  | OE708 CS    | Principles of Python*                                                                 |
| 9                  | OE709AL     | Introduction to Deep Learning*                                                        |
| 10                 | OE710 DS    | Database Management System*                                                           |
| 11                 | OE711 CB    | Privacy & Security in IOT*                                                            |
| 12                 | OE712 IT    | Introduction to Cyber security*                                                       |
| 13                 | OE713 EC    | Fundamentals of IOT<br>(Not for ECE, CSE, IT, AI&ML, IOT, AI&DS students)             |
| 14                 | OE714 EC    | Fundamentals of Neural Networks<br>(Not for ECE, CSE, IT, AI&ML, IOT, AI&DS students) |

\*NOTE: These subjects will not be offered to students of parent department

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
METHODIST COLLEGE OF ENGG. & TECH.  
HYDERABAD

**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. VIII- Semester**  
**(ELECTRONICS AND COMMUNICATION ENGINEERING)**

| S. No.                      | Course Code | Course Title             | Scheme of Instruction |   |     |                 | Scheme of Examination |     |                 | Credits |
|-----------------------------|-------------|--------------------------|-----------------------|---|-----|-----------------|-----------------------|-----|-----------------|---------|
|                             |             |                          | L                     | T | P/D | Contact Hrs /Wk | CIE                   | SEE | Duration in Hrs |         |
| Theory Course               |             |                          |                       |   |     |                 |                       |     |                 |         |
| 1                           | PE5XXEC     | Professional Elective-V  | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| 2                           | PE5XXEC     | Professional Elective-VI | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| 3                           | OE6XXYY     | Open Elective-III        | 3                     | - | -   | 3               | 30                    | 70  | 3               | 3       |
| Practical/Laboratory Course |             |                          |                       |   |     |                 |                       |     |                 |         |
| 4                           | PW704EC     | Major Project Phase-II   | -                     | - | 18  | 18              | 50                    | 100 | 3               | 8       |
| Total                       |             |                          | 9                     | - | 18  | 27              | 140                   | 310 | 12              | 17      |

PE: Professional Elective

OE: Open Elective

PW: Project Work

L: Lecture

T: Tutorial

P: Practical

D: Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

EC: Electronics and Communication Engineering

**Note:**

- Each contact hour is a clock hour.
- The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
**HEAD OF THE DEPARTMENT**  
**DEPARTMENT OF ECE**  
**METHODIST COLLEGE OF ENGG. & TECH.**  
**ABIDS, HYDERABAD.**



| Professional Elective-V |             |                                      |
|-------------------------|-------------|--------------------------------------|
| S. No.                  | Course Code | Course Title                         |
| 1.                      | PE517EC     | Speech Signal Processing             |
| 2.                      | PE518EC     | Wireless Sensor Networks             |
| 3.                      | PE519EC     | Nano Technology and its Applications |
| 4.                      | PE520EC     | Radar Systems                        |

| Professional Elective-VI |             |                                         |
|--------------------------|-------------|-----------------------------------------|
| S. No.                   | Course Code | Course Title                            |
| 1.                       | PE521EC     | Design of Fault Tolerant Systems        |
| 2.                       | PE522EC     | Real Time Operating Systems             |
| 3.                       | PE523EC     | Global Navigational Satellite Systems   |
| 4.                       | PE524EC     | Computer Vision and Pattern Recognition |

| Open Elective – III |             |                                        |
|---------------------|-------------|----------------------------------------|
| S. No.              | Course Code | Course Title                           |
| 1                   | OE801 EE    | Smart Building Systems*                |
| 2                   | OE802 EE    | Programmable Logic Controllers *       |
| 3                   | OE803 AE    | Automotive Maintenance*                |
| 4                   | OE804 ME    | Mechatronics*                          |
| 5                   | OE805 CE    | Essentials of Road Safety Engineering* |
| 6                   | OE806 CS    | Software Engineering*                  |
| 7                   | OE807 AS    | Data Visualization*                    |
| 8                   | OE808 AL    | Human Computer Interaction*            |
| 9                   | OE809 DS    | Cognitive Science and Analytics*       |
| 10                  | OE810 CB    | Principles of Blockchain Technologies* |
| 11                  | OE811 IT    | Mobile Computing*                      |
| 12                  | OE812 EC    | Principles of Embedded Systems*        |
| 13                  | OE813 EC    | Fundamentals of Fuzzy Logic*           |

\*NOTE: These subjects will not be offered to students of parent department

HEAD OF THE DEPARTMENT  
DEPARTMENT OF ECE  
METHODIST COLLEGE OF ENGG. & TECH.  
ABIDS, HYDERABAD.