

| Maharashtra State Board Of Technical Education, Mumbai        |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
|---------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------|-------------|-------------|------------------------|--------------------------|----|----|-----------------------------------------------------|-----------------------------|-----------------------|--------------------------------|-------------------|-------|-------|------------------|----------------------------------------------|-----|-------|------------------------|-------------|-----|-----|-----|-----|-----|--|--|--|--|
| Learning and Assessment Scheme for Post S.S.C Diploma Courses |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| Programme Name                                                |                                           | : Diploma In Electrical Engineering / Electrical Power System |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| Programme Code                                                |                                           | : EE / EP                                                     |             |             |                        |                          |    |    |                                                     |                             |                       | With Effect From Academic Year |                   |       |       |                  | 2023-24                                      |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| Duration Of Programme                                         |                                           | : 6 Semester                                                  |             |             |                        |                          |    |    |                                                     |                             |                       | Duration                       |                   |       |       |                  | : 12 Weeks (Industry) + 10 Weeks (Institute) |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| Semester                                                      |                                           | : Fifth                                                       |             |             |                        |                          |    |    |                                                     |                             |                       | NCrF Entry Level : 4.0         |                   |       |       |                  | Scheme                                       |     |       |                        |             | : K |     |     |     |     |  |  |  |  |
| Sr No                                                         | Course Title                              | Abbreviation                                                  | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme          |    |    |                                                     |                             |                       | Credits                        | Assessment Scheme |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
|                                                               |                                           |                                                               |             |             |                        | Actual Contact Hrs./Week |    |    | Self Learning (Activity/ Assignment /Micro Project) | Notional Learning Hrs /Week | Paper Duration (hrs.) |                                | Theory            |       |       | Based on LL & TL |                                              |     |       | Based on Self Learning | Total Marks |     |     |     |     |     |  |  |  |  |
|                                                               |                                           |                                                               |             |             |                        | CL                       | TL | LL |                                                     |                             |                       |                                |                   |       |       | Practical        |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
|                                                               |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                | FA-TH             | SA-TH | Total |                  | FA-PR                                        |     | SA-PR |                        |             | SLA |     |     |     |     |  |  |  |  |
|                                                               |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       | Max   | Max              | Max                                          | Min | Max   |                        |             | Min | Max | Min | Max | Min |  |  |  |  |
| (All Compulsory)                                              |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| 1                                                             | A.C. MACHINES PERFORMANCE                 | ACM                                                           | DSC         | 315333      | -                      | 5                        | -  | 2  | 2                                                   | 9                           | 3                     | 3                              | 30                | 70    | 100   | 40               | 25                                           | 10  | 25#   | 10                     | 25          | 10  | 175 |     |     |     |  |  |  |  |
| 2                                                             | SWITCHGEAR AND PROTECTION                 | SGP                                                           | DSC         | 315334      | -                      | 5                        | -  | 2  | 2                                                   | 9                           | 3                     | 3                              | 30                | 70    | 100   | 40               | 25                                           | 10  | 25#   | 10                     | 25          | 10  | 175 |     |     |     |  |  |  |  |
| 3                                                             | ENTREPRENEURSHIP DEVELOPMENT AND STARTUPS | ENDS                                                          | AEC         | 315002      | -                      | 1                        | -  | 2  | -                                                   | 3                           | 1                     | -                              | -                 | -     | -     | -                | 50                                           | 20  | 25@   | 10                     | -           | -   | 75  |     |     |     |  |  |  |  |
| 4                                                             | SEMINAR AND PROJECT INITIATION COURSE     | SPI                                                           | AEC         | 315003      | -                      | -                        | -  | 1  | 2                                                   | 3                           | 1                     | -                              | -                 | -     | -     | -                | 25                                           | 10  | 25@   | 10                     | 25          | 10  | 75  |     |     |     |  |  |  |  |
| 5                                                             | INTERNSHIP(12 WEEKS)                      | ITR                                                           | INP         | 315004      | -                      | -                        | -  | -  | -                                                   | 36 - 40                     | 10                    | -                              | -                 | -     | -     | -                | 100                                          | 40  | 100#  | 40                     | -           | -   | 200 |     |     |     |  |  |  |  |
| Elective-I (Any - One )                                       |                                           |                                                               |             |             |                        |                          |    |    |                                                     |                             |                       |                                |                   |       |       |                  |                                              |     |       |                        |             |     |     |     |     |     |  |  |  |  |
| 6                                                             | ELECTRIC VEHICLE TECHNOLOGY               | EVT                                                           | DSE         | 315335      | -                      | 4                        | -  | 2  | -                                                   | 6                           | 2                     | 3                              | 30                | 70    | 100   | 40               | 25                                           | 10  | 25#   | 10                     | -           | -   | 150 |     |     |     |  |  |  |  |
|                                                               | POWER SYSTEM OPERATION AND CONTROL        | PSO                                                           | DSE         | 315336      | -                      | 4                        | -  | 2  | -                                                   | 6                           | 2                     | 3                              | 30                | 70    | 100   | 40               | 25                                           | 10  | 25#   | 10                     | -           | -   | 150 |     |     |     |  |  |  |  |
|                                                               | RENEWABLE ENERGY TECHNOLOGY               | RET                                                           | DSE         | 315337      | -                      | 4                        | -  | 2  | -                                                   | 6                           | 2                     | 3                              | 30                | 70    | 100   | 40               | 25                                           | 10  | 25#   | 10                     | -           | -   | 150 |     |     |     |  |  |  |  |
| Total                                                         |                                           |                                                               |             |             |                        | 15                       |    | 9  | 6                                                   |                             | 20                    |                                | 90                | 210   | 300   |                  | 250                                          |     | 225   |                        | 75          |     | 850 |     |     |     |  |  |  |  |

| Sr<br>No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme          |    |    | Credits | Assessment Scheme                                   |                             |                       |        |       |       |                  |       |     |       | Total Marks |                        |     |     |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |             |             |                        | Actual Contact Hrs./Week |    |    |         | Self Learning (Activity/ Assignment /Micro Project) | Notional Learning Hrs /Week | Paper Duration (hrs.) | Theory |       |       | Based on LL & TL |       |     |       |             | Based on Self Learning |     |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |             |             |                        | CL                       | TL | LL |         |                                                     |                             |                       |        |       |       | Practical        |       |     |       |             |                        |     |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |             |             |                        |                          |    |    |         |                                                     |                             |                       | FA-TH  | SA-TH | Total |                  | FA-PR |     | SA-PR |             | SLA                    |     |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |             |             |                        |                          |    |    |         |                                                     |                             |                       |        |       |       |                  | Max   | Min | Max   |             | Min                    | Max | Min |
| <b>Abbreviations :</b> CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment,SA -Summative Assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment<br><b>Legends :</b> @ Internal Assessment, # External Assessment, *# On Line Examination , @\$ Internal Online Examination<br><b>Note :</b><br>1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.<br>2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.<br>3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.<br>4. Notional Learning hours for the semester are (CL+LL+TL+SL)hrs.* 10 Weeks<br>5. 1 credit is equivalent to 30 Notional hrs.<br>6. * Self learning hours shall not be reflected in the Time Table.<br>7. * Self learning includes micro project / assignment / other activities. <b>Note:</b> Notional learning hours for <b>internship represents the student engagement hours.</b><br><b>Course Category :</b> Discipline Specific Course Core (DSC) , Discipline Specific Elective (DSE) , Value Education Course (VEC) , Intern./Apprenti./Project./Community (INP) , AbilityEnhancement Course (AEC) , Skill Enhancement Course (SEC) , GenericElective (GE) |              |              |             |             |                        |                          |    |    |         |                                                     |                             |                       |        |       |       |                  |       |     |       |             |                        |     |     |