

**Sardar Patel College of Engineering**  
**Academic Year 2023-24**  
**Credit System for Minor in Civil engineering**

| Sr. No.       | Course Name   | Code      | Course Plan per Week (Hrs) |   |   | Credits | In semester Evaluation (Points) |      | End Semester Evaluation (Points) |            | End semester weightage (%) | Term work/Practical | Total Points |
|---------------|---|-----------|----------------------------|---|---|---------|---------------------------------|------|----------------------------------|------------|----------------------------|---------------------|--------------|
|               |   |           | L                          | P | T |         | T-I                             | T-II | Points                           | Time (Hrs) |                            |                     |              |
| Semester V    |   |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
| 1             | Building materials and construction (Building Services)   | PC-BTC307 | 2                          | 0 | 1 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 25#                 | 125          |
| 2             | Mechanics of Materials <sup>\$</sup>                      | ES-BTC302 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
|               | Total credits for Minors student                          |           |                            |   |   | 6       |                                 |      |                                  |            |                            |                     |              |
| Semester VI   |   |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
| 3             | Any 2 to be selected from following :                     |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
|               | a) Transportation Engineering                             | PC-BTC406 | 2                          | 0 | 1 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 25#                 | 125          |
|               | b) Structural mechanics                                   | PC-BTC402 | 3                          | 0 | 1 | 4       | 20                              | 20   | 100                              | 3          | 60%                        | 25#                 | 125          |
|               | c)Environmental Engineering-I                             | PC-BTC407 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
| 4             | Concrete Technology (Lab)                                 | PC-BTC451 | 0                          | 2 | 0 | 1       | 0                               | 0    | 0                                | 0          | 0                          | 25#                 | 25           |
|               | Total credits for Minors student                          |           |                            |   |   | 7/8     |                                 |      |                                  |            |                            |                     |              |
| Semester VII  |   |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
| 5             | Soil Mechanics  | PC-BTC503 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
|               | Total credits for Minors student                          |           |                            |   |   | 3       |                                 |      |                                  |            |                            |                     |              |
| Semester VIII |   |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
| 6             | Any one elective from following                           |           |                            |   |   |         |                                 |      |                                  |            |                            |                     |              |
|               | Construction Engineering & Management                     | PC-BTC601 | 3                          | 0 | 1 | 4       | 20                              | 20   | 100                              | 3          | 60%                        | 25#                 | 125          |
|               | Geographic Information System Science and Application     | PE-BTC622 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
|               | Solid and Hazardous Waste Management                      | PE-BTC651 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
|               | Sustainable development                                   | OE-BTC612 | 3                          | 0 | 0 | 3       | 20                              | 20   | 100                              | 3          | 60%                        | 0                   | 100          |
|               | Total credits for Minors student                          |           |                            |   |   | 3/4     |                                 |      |                                  |            |                            |                     |              |
|               | TOTAL additional credits at graduation for Minors student |           |                            |   |   | 20 / 21 |                                 |      |                                  |            |                            |                     |              |

(\*) - Credits for online courses are directly specified as 3 credits for 12 week course and 2 credits for 8 week course. In-semester and end-semester evaluations are conducted by the agency coordinating for the online course (NPTEL/SWAYAM/IITBombayx, etc.). The grades shall be awarded based on applicable examination rules and regulations.

(\$) Students who have already studied Mechanics of Materials/Strength of materials as a part of their core course need to study an NPTEL course of 12 weeks after approval from Department HOD and Dean academics

. Students may take relevant course from domain offered from NPTEL/SWAYAM/IITBombayx etc. platform subject to approval from Dean (Academics)

**Minimum 18 credits should be achieved for completion of the Minor program**