



## Chhattisgarh Swami Vivekanand Technical University, Bhilai (CG)

### Scheme for B. Tech. First Semester (Mechanical Engineering (Automobile 3148))

| S.No.                         | Board of Studies (BOS)       | Courses (Subject)                                    | Subject Code | Course Category | Period per Week |   |    | Scheme of Examination |     |     | Total Marks | Credits | Assessment/assignment hours per week | Teaching Hours/sem |
|-------------------------------|------------------------------|------------------------------------------------------|--------------|-----------------|-----------------|---|----|-----------------------|-----|-----|-------------|---------|--------------------------------------|--------------------|
|                               |                              |                                                      |              |                 | L               | T | P  | Theory/Lab            |     |     |             |         |                                      |                    |
|                               |                              |                                                      |              |                 |                 |   |    | ESE                   | CT  | TA  |             |         |                                      |                    |
| 1.                            | Applied Mathematics          | Engineering Mathematics-1                            | 3000A02AT014 | BFC-BSC         | 3               | 1 |    | 100                   | 20  | 20  | 140         | 4       | 1                                    | 60                 |
| 2.                            | Applied Physics              | Engineering Physics (Non Circuit)                    | 3000A04AT015 | BFC-BSC         | 3               | - | -  | 100                   | 20  | 20  | 140         | 3       | 1                                    | 45                 |
| 3.                            | Electrical Engineering       | Basic Electrical Engineering                         | 3000A05AT024 | BFC-ESC         | 3               | - | -  | 100                   | 20  | 20  | 140         | 3       | 1                                    | 45                 |
| 4.                            | Mechanical                   | Fundamentals of Mechanical Engineering               | 3037A01CT037 | SBS-PCC         | 3               | 1 | -  | 100                   | 20  | 20  | 140         | 4       | 1                                    | 60                 |
| 5.                            | Humanities                   | Professional Communication Skills                    | 3000A06DT046 | AEC-HSM C       | 2               |   | -  | 50                    | 10  | 10  | 70          | 2       | 1                                    | 30                 |
| 6.                            | Humanities                   | Foundation course on Ancient Indian Knowledge System | 3000A07ET046 | IKS             | 2               | - | -  | 50                    | 10  | 10  | 70          | 2       | 1                                    | 30                 |
| 7.                            | Computer Science Engineering | Fundamentals of Computer & IT Lab                    | 3000A02CL022 | SBS-ESC         | -               | - | 4  | 40                    | -   | 20  | 60          | 2       | 1                                    | 60                 |
| 8.                            | Mechanical                   | Fundamentals of Mechanical Engineering (Lab)         | 3037A01CL037 | SBS-PCC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | -                                    | 30                 |
| 9.                            | Applied Physics              | Engineering Physics Lab (Non Circuit)                | 3000A04AL015 | BFC-BSC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | -                                    | 30                 |
| 10.                           | Electrical Engineering       | Basic Electrical Engineering Lab                     | 3000A05AL024 | BFC-ESC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | -                                    | 30                 |
| 11.                           | Humanities                   | Sports & Yoga                                        | 3000A06FL046 | VAC-MNC AU      | -               | - | 2  | -                     | -   | 30  | 30          | -       | -                                    | 30                 |
| 12.                           | Humanities                   | Social Service/Community Services                    | 3000A07FL046 | VAC-MNC AU      | -               | - | 2  | -                     | -   | 30  | 30          | -       | -                                    | 30                 |
| 13.                           |                              | Library                                              |              |                 |                 | 1 |    |                       |     |     |             |         |                                      | 15                 |
| Total                         |                              |                                                      |              |                 | 16              | 3 | 14 | 660                   | 100 | 240 | 1000        | 23      | 105                                  | 495                |
| Total Learning Hours/Semester |                              |                                                      |              |                 |                 |   |    |                       |     |     |             |         | 600                                  |                    |

**L-Lecture, P-Practical, ESE-End semester Exam, CT-Class Test, TA-Teacher's Assessment**

**Note: Abbreviations of Course category**

**BFC- Basics Foundation Course**

**SBS- Skilled Based Subject (Branch Specific)**

**IKS- Indian Knowledge System**

**AEC- Ability Enhancement Course**

**VAC- Value Added Course**

**BSC- Basic Science Courses**

**ESC- Engineering Science Courses**

**PCC- Professional Core Courses**

**HSMC- Humanities, Social Sciences & Management Courses**

**MNC AU-Mandatory Non Credit Courses – Audit Course**



## Chhattisgarh Swami Vivekanand Technical University, Bhilai (CG)

### Scheme for B. Tech. Second Semester (Mechanical Engineering (Automobile Engineering 3148))

| Sl. No.                       | Board of Studies (BOS)       | Courses (Subject)                      | Subject Code | Course Category | Period per Week |   |    | Scheme of Examination |     |     | Total Marks | Credits | Assessment/assignment hours per week | Teaching Hours |
|-------------------------------|------------------------------|----------------------------------------|--------------|-----------------|-----------------|---|----|-----------------------|-----|-----|-------------|---------|--------------------------------------|----------------|
|                               |                              |                                        |              |                 | L               | T | P  | Theory/Lab            |     |     |             |         |                                      |                |
|                               |                              |                                        |              |                 |                 |   |    | ESE                   | CT  | TA  |             |         |                                      |                |
| 1.                            | Applied Mathematics          | Engineering Mathematics-II             | 3000B02AT014 | BFC-BSC         | 3               | 1 | -  | 100                   | 20  | 20  | 140         | 4       | 2                                    | 60             |
| 2.                            | Mechanical                   | Smart Manufacturing                    | 3037B01CT037 | SBS-PCC         | 3               | - | -  | 100                   | 20  | 20  | 140         | 3       | 2                                    | 45             |
| 3.                            | Applied Chemistry            | Environmental Chemistry                | 3000B03AT011 | BFC-BSC         | 3               | - | -  | 100                   | 20  | 20  | 140         | 3       | 2                                    | 45             |
| 4.                            | Computer Science Engineering | Concepts of Programming Language       | 3000B04AT022 | BFC-ESC         | 3               | - | -  | 100                   | 20  | 20  | 140         | 3       | 1                                    | 45             |
| 5.                            | Humanities                   | Indian Culture and Constitution        | 3000B05ET046 | IKS             | 2               | - | -  | 50                    | 10  | 10  | 70          | 2       | 1                                    | 30             |
| 6.                            | Management                   | Cyber Law and Ethics                   | 3000B06FT076 | VAC             | 1               | - | -  | 50                    | 10  | 10  | 70          | 1       | 1                                    | 15             |
| 7.                            | Computer Science Engineering | Concepts of Programming Language (Lab) | 3000B02AL022 | BFC-ESC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | 1                                    | 30             |
| 8.                            | Mechanical Engineering       | Engineering Graphics (Lab)             | 3000B03AL037 | BFC-BSC         | -               | - | 4  | 40                    | -   | 20  | 60          | 2       | 1                                    | 60             |
| 9.                            | Applied Chemistry            | Environmental Chemistry (Lab)          | 3000B04AL011 | BFC-BSC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | -                                    | 30             |
| 10.                           | Mechanical                   | Smart Manufacturing (Lab)              | 3037B01CL037 | SBS-PCC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | -                                    | 30             |
| 11.                           | Humanities                   | Value Education                        | 3000B07FT046 | VAC-MNCAU       | 1               | - | -  | -                     | -   | 30  | 30          | -       | -                                    | 15             |
| 12.                           | Civil Engineering            | Civil Engg-Societal and Global Impact  | 3000B08FT020 | VAC-MNCAU       | 1               | - | -  | -                     | -   | 30  | 30          | -       | -                                    | 15             |
| 13.                           |                              | Library                                |              |                 |                 | 1 |    |                       |     |     |             |         |                                      | 15             |
| Total                         |                              |                                        |              |                 | 17              | 2 | 10 | 660                   | 100 | 240 | 1000        | 21      | 165                                  | 435            |
| Total Learning Hours/semester |                              |                                        |              |                 |                 |   |    |                       |     |     |             |         | 600                                  |                |

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## CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

### Scheme of Teaching and Examination

#### Scheme for B.Tech Third Semester (Mechanical Engineering (Automobile)-3148)

| Sl. No.                       | Board of Studies (BOS) | Courses (Subject)                 | Subject Code | Course Category | Period per Week |   |    | Scheme of Examination |     |     | Total Marks | Credits | Teaching Hours/sem | Assessment hours/sem (Assignment/ Practical file) |
|-------------------------------|------------------------|-----------------------------------|--------------|-----------------|-----------------|---|----|-----------------------|-----|-----|-------------|---------|--------------------|---------------------------------------------------|
|                               |                        |                                   |              |                 | L               | T | P  | Theory/Lab            |     |     |             |         |                    |                                                   |
|                               |                        |                                   |              |                 |                 |   |    | ESE                   | CT  | TA  |             |         |                    |                                                   |
| 1                             | Applied Mathematics    | Engineering Mathematics-III       | 3000C01AT014 | BFS-BSC         | 2               | 1 | -  | 100                   | 20  | 20  | 140         | 3       | 45                 | 15                                                |
| 2                             | Mechanical Engineering | Engineering Thermodynamics        | 3037C02BT037 | PCC             | 2               | 1 | -  | 100                   | 20  | 20  | 140         | 3       | 45                 | 15                                                |
| 3                             | Mechanical Engineering | Mechanics of Solids - I           | 3037C03BT037 | PCC             | 2               | 1 | -  | 100                   | 20  | 20  | 140         | 3       | 45                 | 15                                                |
| 4                             | Mechanical Engineering | Automotive Petrol Engines         | 3037C04CT037 | SBS-PCC         | 2               | 1 | -  | 100                   | 20  | 20  | 140         | 3       | 45                 | 15                                                |
| 5                             | Mechanical Engineering | Mechanics of Two & Three Wheelers | 3037C05CT037 | SBS-PCC         | 2               | 1 | -  | 100                   | 20  | 20  | 140         | 3       | 45                 | 15                                                |
| 6                             | Humanities             | Life Concept by Bhagwat Gita      | 3000C06ET046 | IKS             | 2               | - | -  | 100                   | 20  | 20  | 140         | 2       | 30                 | 15                                                |
| 7                             | Mechanical Engineering | Engineering Thermodynamics Lab    | 3148C01BL037 | PCC             | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | 30                 | 15                                                |
| 8                             | Mechanical Engineering | Mechanics of Solids Lab           | 3148C02BL037 | PCC             | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | 30                 | 15                                                |
| 9                             | Mechanical Engineering | Automotive Petrol Engines Lab     | 3148C03CL037 | SBS-PCC         | -               | - | 2  | 40                    | -   | 20  | 60          | 1       | 30                 | 15                                                |
| 10                            | Mechanical Engineering | Idea Innovation Lab               | 3148C04FL037 | VAC             |                 | - | 2  | -                     | -   | 40  | 40          | 1       | 30                 | 15                                                |
| 11                            | Management             | Personality Development           | 3000C07DT076 | AEC-MNC AU      | 1               |   | 2  |                       |     | 40  | 40          | -       | 45                 | 15                                                |
| 12                            |                        | Library                           |              |                 |                 | 1 |    | -                     | -   | -   | -           | -       | 15                 | -                                                 |
| Total                         |                        |                                   |              |                 | 13              | 6 | 10 | 720                   | 120 | 260 | 1100        | 21      | 435                | 165                                               |
| Total Learning Hours/Semester |                        |                                   |              |                 |                 |   |    |                       |     |     |             |         | 600                |                                                   |

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