



# Walchand College of Engineering

(Government Aided Autonomous Institute)

## Credit System for Third Year B. Tech. (Electrical Engineering)

Applicable from AY 2025-26

### Semester V

| Sr. No.                           | Category | Course Code | Course Name                             | L  | T | I | P | Hrs | Cr | MSE/LA1 | ISE/LA2 | ESE | Ext |
|-----------------------------------|----------|-------------|---|----|---|---|---|-----|----|---------|---------|-----|-----|
| <b>Professional Core (Theory)</b> |          |             |   |    |   |   |   |     |    |         |         |     |     |
| 01                                | PCC      | 7EL301      | Power System Analysis and Stability     | 3  | 0 | 0 | 0 | 3   | 3  | 30      | 20      | 50  |     |
| 02                                | PCC      | 7EL302      | Control Systems Engineering             | 3  | 0 | 0 | 0 | 3   | 3  | 30      | 20      | 50  |     |
| 03                                | PCC      | 7EL303      | Digital Signal Processing               | 3  | 0 | 0 | 0 | 3   | 3  | 30      | 20      | 50  |     |
| 04                                | PCC      | 7EL304      | Energy Storage Systems for EV           | 2  | 0 | 0 | 0 | 2   | 2  | 30      | 20      | 50  |     |
| <b>Professional Core (Lab)</b>    |          |             |   |    |   |   |   |     |    |         |         |     |     |
| 05                                | PCC      | 7EL351      | Power System Analysis and Stability Lab | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |
| 06                                | PCC      | 7EL352      | Control Systems Engineering Lab         | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |
| 07                                | PCC      | 7EL353      | Digital Signal Processing Lab           | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |
| <b>Value Education Course</b>     |          |             |   |    |   |   |   |     |    |         |         |     |     |
| 08                                | VEC      | 7VE301      | Environmental Science                   | 2  | 0 | 0 | 0 | 2   | 2  | 30      | 20      | 50  |     |
| <b>Open Elective</b>              |          |             |   |    |   |   |   |     |    |         |         |     |     |
| 09                                | OE       | Refer List  | Open Elective - 1                       | 2  | 0 | 1 | 0 | 3   | 3  | 30      | 20      | 50  |     |
| <b>Multi-Disciplinary Minor</b>   |          |             |   |    |   |   |   |     |    |         |         |     |     |
| 10                                | MDM      | Refer List  | MDM                                     | 2  | 0 | 1 | 0 | 3   | 3  | 30      | 20      | 50  |     |
| Total                             |          |             |   | 17 | 0 | 2 | 6 | 25  | 22 |         |         |     |     |

Mr. A. B. Patil  
DAC/Member Secretary, BoS

Dr. V. P. Mohale  
HOD / Chairman, BoS

Dr. A.K. Kokane  
Dean Academics

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### Semester VI

| Sr. No.  | Category | Course Code | Course Name                                  | L  | T | I | P | Hrs | Cr | MSE/LA1 | ISE/LA2 | ESE | Ext |  |
|--|----------|-------------|--|----|---|---|---|-----|----|---------|---------|-----|-----|--|
| <b>Professional Core (Theory)</b>              |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 01   | PCC      | 7EL321      | Industrial Drives and Control                | 2  | 0 | 0 | 0 | 2   | 2  | 30      | 20      | 50  |     |  |
| 02   | PCC      | 7EL322      | Microcontroller and Applications             | 3  | 0 | 0 | 0 | 3   | 3  | 30      | 20      | 50  |     |  |
| 03   | PCC      | 7EL323      | Power System Protection                      | 2  | 0 | 0 | 0 | 2   | 2  | 30      | 20      | 50  |     |  |
| <b>Professional Core (Lab)</b>                 |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 04   | PCC      | 7EL371      | Industrial Drives and Control Lab            | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |  |
| 05   | PCC      | 7EL372      | Microcontroller and Applications Lab         | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |  |
| 06   | PCC      | 7EL373      | Power System Protection Lab                  | 0  | 0 | 0 | 2 | 2   | 1  | 30      | 30      | 40  | POE |  |
| <b>Professional Elective Course</b>            |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 07   | PEC      | Refer List  | Program Elective - I                         | 3  | 0 | 0 | 0 | 3   | 3  | 30      | 20      | 50  |     |  |
| <b>Open Elective</b>                           |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 08   | OE       | Refer List  | Open Elective - 2                            | 2  | 0 | 1 | 0 | 3   | 3  | 30      | 20      | 50  |     |  |
| <b>Multi-Disciplinary Minor</b>                |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 09   | MDM      | Refer List  | MDM  | 2  | 0 | 1 | 0 | 3   | 3  | 30      | 20      | 50  |     |  |
| <b>Entrepreneurship / Economics</b>            |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 10   | EEM      | 7EE301      | Engineering Economics & Financial Management | 2  | 0 | 0 | 0 | 2   | 2  | 30      | 20      | 50  |     |  |
| <b>Vocational Skill and Enhancement Course</b> |          |             |  |    |   |   |   |     |    |         |         |     |     |  |
| 11   | VESC     | 7VSEL371    | Mini Project                                 | 0  | 0 |   | 2 | 2   | 1  | 30      | 30      | 40  |     |  |
| Total  |          |             |  | 16 | 0 | 2 | 8 | 26  | 22 |         |         |     |     |  |

  
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### Professional Elective Course List for T. Y. B. Tech. (Electrical Engineering) Sem-VI AY 2025-26

| Sr. No                     | Course Code | Course Name                            |
|----------------------------|-------------|--|
| <b>Program Elective -1</b> |             |  |
| 1                          | 7EL331      | Electromagnetic Fields                 |
| 2                          | 7EL332      | Energy Audit and Management            |
| 3                          | 7EL333      | Non-Linear and Digital Control Systems |

  
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