**COURSES:**

**Electrical Engineering Courses**

Electrical Engineering Department offers 3- Years (6 semesters) Diploma in Electrical

**CURRICULUM FOR DIPLOMA**

* [1st Year](https://www.vssut.ac.in/pdf/first_year_civil.pdf)(Front Page of Syllabus)
* [2nd Year](https://www.vssut.ac.in/pdf/second_year_civil.pdf)
* [3rd Year](https://www.vssut.ac.in/pdf/third_year_civil.pdf)

**SYLLABUS**

* [DIPLOMA IN ELECTRICAL ENGINEERING 2018-19 onwards](https://www.vssut.ac.in/pdf/BTech%20CE_Course%202015-16.pdf)(Syllabus)
* [DIPLOMA IN ELECTRICAL ENGINEERING 2013-14](https://www.vssut.ac.in/pdf/BTech%20CE_Course%202011-12.pdf)

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| STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA | | | | | | | | | |
| **TEACHING AND EVALUATION SCHEME FOR 3rd Semester Electrical Engg.(wef 2019-20)** | | | | | | | | | |
| Subject Number | Subject Code | Subject | Periods/week | | | Evaluation Scheme | | | |
| L | T | P | Internal Assessment/ Sessional: | End Sem Exams | Exams (Hours) | Total |
| **Theory** | | | | | | | |
| Th.1 |  | Engineering Mathematics-III | 4 |  | - | 20 | 80 | 3 | 100 |
| Th.2 |  | Circuit and Network Theory | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.3 |  | Element of Mechanical Engineering | 4 |  | - | 20 | 80 | 3 | 100 |
| Th.4 |  | Electrical Engineering Material | 4 |  |  | 20 | 80 | 3 | 100 |
| Th.5 |  | Environmental studies | 4 |  |  | 20 | 80 | 3 | 100 |
|  |  | *Total* | 20 | 01 |  | 100 | 400 | - | 500 |
|  |  | **Practical** |  | | | | | | |
| Pr.1 |  | Mechanical Engineering Lab | - | - | 3 | 25 | 50 | 3 | 75 |
| Pr.2 |  | Circuit and Simulation Lab | - | - | 6 | 50 | 50 | 3 | 100 |
| Pr.3 |  | Mechanical Workshop | - | - | 6 | 25 | 50 | 3 | 75 |
|  |  | Student Centred Activities(SCA) |  | - | 3 | - | - | - | - |
|  |  | *Total* | *-* | *-* | *18* | *100* | *150* | *-* | *250* |
|  |  | **Grand Total** | **20** | **01** | **18** | **200** | **550** | **-** | **750** |
| Abbreviations: L-Lecturer, T-Tutorial, P-Practical . Each class is of minimum 55 minutes duration | | | | | | | | | |
| Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40% | | | | | | | | | |
| **SCA shall comprise of Extension Lectures/ Personality Development/ Environmental issues /Quiz /Hobbies/ Field visits/**  **cultural activities/Library studies/Classes on MOOCS/SWAYAM etc., Seminar and SCA shall be conducted in a section.** | | | | | | | | | |
| **There shall be 1 Internal Assessment done for each of the Theory Subject. Sessional: Marks shall be total of the**  **performance of individual different jobs/ experiments in a subject throughout the semester** | | | | | | | | | |

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| STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA | | | | | | | | | |
| **TEACHING AND EVALUATION SCHEME FOR 4th Semester (Electrical)(wef 2019-20)** | | | | | | | | | |
| Subject Number | Subject Code | Subject | Periods/week | | | Evaluation Scheme | | | |
| L | T | P | Internal  Assessment/ Sessional | End Sem Exams | Exams (Hours) | Total |
| **Theory** | | | | | | | |
| Th.1 |  | Energy Conversion-I | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.2 |  | Analog Electronics & OP-Amp | 4 |  | - | 20 | 80 | 3 | 100 |
| Th.3 |  | Electrical Measurement  & Instrumentation | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.4 |  | Generation,  Transmission and Distribution | 4 |  |  | 20 | 80 | 3 | 100 |
|  |  | *Total* | *16* | *02* |  | *80* | *320* | *-* | *400* |
|  |  | **Practical** |  | | | | | | |
| Pr.1 |  | Electrical Machine Lab-I | - | - | 6 | 25 | 50 | 3 | 75 |
| Pr.2 |  | Analog Electronics Lab | - | - | 3 | 25 | 50 | 3 | 75 |
| Pr.3 |  | Simulation Practice on  MATLAB | - | - | 3 | 25 | 50 | 3 | 75 |
| Pr.4 |  | Electrical Drawing |  |  | 6 | 25 | 100 | 3 | 125 |
|  |  | Student Centered Activities(SCA) |  | - | 3 |  |  |  |  |
|  |  | *Total* | *-* | *-* | *21* | *100* | *250* | *-* | *350* |
|  |  | **Grand Total** | **16** | **02** | **21** | **180** | **520** | **-** | **750** |
| Abbreviations: L-Lecturer, T-Tutorial, P-Practical . Each class is of minimum 55 minutes duration | | | | | | | | | |
| **Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40%** | | | | | | | | | |
| **SCA shall comprise of Extension Lectures/ Personality Development/ Environmental issues /Quiz /Hobbies/ Field visits/ cultural activities/Library studies/Classes on MOOCS/SWAYAM etc. ,Seminar and SCA shall be conducted in a section.** | | | | | | | | | |
| **There shall be 1 Internal Assessment done for each of the Theory Subject. Sessional Marks shall be total of the performance of individual different**  **jobs/ experiments in a subject throughout the semester** | | | | | | | | | |

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| STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA | | | | | | | | | |
| **TEACHING AND EVALUATION SCHEME FOR 5th Semester (Electrical)(wef 2020-21)** | | | | | | | | | |
| Subject Number | Subject Code | Subject | Periods/week | | | Evaluation Scheme | | | |
| L | T | P | Internal Assessment/  Sessional | End Sem  Exams | Exams  (Hours) | Total |
| **Theory** | | | | | | | |
| Th.1 |  | Entrepreneurship and  Management & Smart Technology | 4 |  | - | 20 | 80 | 3 | 100 |
| Th.2 |  | Energy Conversion-II | 4 |  | - | 20 | 80 | 3 | 100 |
| Th.3 |  | Digital Electronics &  Microprocessor | 5 |  | - | 20 | 80 | 3 | 100 |
| Th.4 |  | Utilization of Electrical Energy &  Traction | 4 |  |  | 20 | 80 | 3 | 100 |
| Th.5 |  | Power Electronics & PLC\* | 4 |  |  | 20 | 80 | 3 | 100 |
|  |  | *Total* | 21 |  |  | 100 | 400 | - | 500 |
|  |  | **Practical** |  | | | | | | |
| Pr.1 |  | Electrical Machine Lab-II | - | - | 6 | 25 | 50 | 3 | 75 |
| Pr.2 |  | Power Electronics & PLC Lab | - | - | 3 | 25 | 50 | 3 | 75 |
| Pr.3 |  | Digital Electronics &  Microprocessor Lab | - | - | 3 | 25 | 50 | 3 | 75 |
| Pr.4 |  | Project Phase– I |  |  | 3 | 25 | - | - | 25 |
|  |  | Student Centered Activities(SCA) |  | - | 3 | - | - | - | - |
|  |  | *Total* | *-* | *-* | *18* | *100* | *150* | *-* | *250* |
|  |  | **Grand Total** | **21** | **-** | **18** | **200** | **550** | **-** | **750** |
| Abbreviations: L-Lecturer, T-Tutorial, P-Practical. Each class is of minimum 55 minutes duration | | | | | | | | | |
| Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40% | | | | | | | | | |
| **SCA shall comprise of Extension Lectures/ Personality Development/ Environmental issues /Quiz /Hobbies/ Field visits/ cultural activities/Library studies/Classes on**  **MOOCS/SWAYAM etc. Seminar and SCA shall be conducted in a section.** | | | | | | | | | |
| **There shall be 1 Internal Assessment done for each of the Theory Subject. Sessional Marks shall be total of the performance of individual different jobs/ experiments**  **in a subject throughout the semester** | | | | | | | | | |

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| STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA | | | | | | | | | |
| **TEACHING AND EVALUATION SCHEME FOR 6th Semester (Electrical)(wef 2020-21)** | | | | | | | | | |
| Subject Number | Subject Code | Subject | Periods/week | | | Evaluation Scheme | | | |
| L | T | P | Internal Assessment/ Sessional | End Sem Exams | Exams (Hours) | Total |
| **Theory** | | | | | | | |
| Th.1 |  | Electrical Installation And Estimating | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.2 |  | Switch Gear And Protective Devices | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.3 |  | Control System Engineering | 4 | 1 | - | 20 | 80 | 3 | 100 |
| Th.4 |  | Elective (Any one to be opted)   1. Testing And Maintenance of Electrical Machine 2. Renewable Energy 3. Electric vehicle | 4 | 1 |  | 20 | 80 | 3 | 100 |
|  |  | *Total* | *16* | *04* |  | *80* | *320* | *-* | *400* |
|  |  | **Practical** |  | | | | | | |
| Pr.1 |  | Electrical Workshop | - | - | 6 | 50 | 100 | 3 | 150 |
| Pr.2 |  | Project Phase- II |  |  | 8 | 50 | 100 | 3 | 150 |
| Pr.3 |  | Life Skill | - | - | 2 | 50 | - | 3 | 50 |
|  |  | Student Centred Activities(SCA) |  | - | 3 | - | - | - | - |
|  |  | *Total* | *-* | *-* | *19* | *150* | *200* | *-* | *350* |
|  |  | **Grand Total** | **16** | **04** | **19** | **205** | **545** | **-** | **750** |
| Abbreviations: L-Lecturer, T-Tutorial, P-Practical . Each class is of minimum 55 minutes duration | | | | | | | | | |
| **Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40%** | | | | | | | | | |
| **SCA shall comprise of Extension Lectures/ Personality Development/ Environmental issues /Quiz /Hobbies/ Field visits/ cultural activities/Library studies/Classes on MOOCS/SWAYAM/Idea Tinkering and Innovation Lab Practice etc. ,Seminar and SCA shall be conducted**  **in a section.** | | | | | | | | | |
| **There shall be 1 Internal Assessment done for each of the Theory Subject. Sessional Marks shall be total of the performance of**  **individual different jobs/ experiments in a subject throughout the semester** | | | | | | | | | |