

|                                                     |                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Module Name</b>                                  | <b>Electrical Engineering Lab</b>                                                                                                                                                                                                                                                                                                       |
| <b>Module Number</b>                                | Eul-RES-C-PrET                                                                                                                                                                                                                                                                                                                          |
| <b>Responsible Lecturer</b>                         | Prof. Dr. phil. nat. habil. Ronald Tetzlaff<br>ronald.tetzlaff@tu-dresden.de                                                                                                                                                                                                                                                            |
| <b>Qualification Objectives</b>                     | After completing the module, students master the use of electronic measuring instruments. They possess extensive skills and experience in setting up and conducting experiments, evaluating and presenting experimental and measurement results, assessing measurement methods and uncertainties, and maintaining proper documentation. |
| <b>Contents</b>                                     | The module covers measurements on electronic circuits, including computer-controlled measurement technology.                                                                                                                                                                                                                            |
| <b>Teaching and Learning Forms</b>                  | 2 hours per week of practical training and self-study.                                                                                                                                                                                                                                                                                  |
| <b>Prerequisites for Participation</b>              | The competencies to be acquired in the modules Basics of Electrical Engineering, Introduction to Analysis and Algebra, Multidimensional Differential and Integral Calculus, as well as Electric and Magnetic Fields, are required.                                                                                                      |
| <b>Usability</b>                                    | The module is a compulsory module of the basic study program in the diploma programs Electrical Engineering, Information Systems Engineering, and Mechatronics. It creates the prerequisites for the modules that list this module in the field "Prerequisites for Participation."                                                      |
| <b>Prerequisites for the Award of Credit Points</b> | Credit points are awarded when the module examination is passed. The module examination consists of a complex performance assessment with a total duration of 22 hours.                                                                                                                                                                 |
| <b>Credit Points and Grades</b>                     | 2 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.                                                                                                                                                                                                             |
| <b>Frequency of the Module</b>                      | The module is offered annually, starting in the winter semester.                                                                                                                                                                                                                                                                        |
| <b>Workload</b>                                     | The total workload is 60 hours.                                                                                                                                                                                                                                                                                                         |
| <b>Duration of the Module</b>                       | The module lasts two semesters.                                                                                                                                                                                                                                                                                                         |