

Module Name	Operation of Electrical Power Supply Systems
Module Number	Eul-ET-C-BeEVS, Eul-RES-E-BeEVS
Responsible Lecturer	Prof. Dr.-Ing. habil. Martin Wolter martin.wolter@tu-dresden.de
Qualification Objectives	After completing the module, students are able to evaluate various operating modes and fault conditions in electrical power supply systems and calculate them using simplified methods. They are capable of reproducing these processes through measurements and assessing the resilience of individual operating equipment to the resulting stresses.
Contents	The module covers the calculation of symmetrical and asymmetrical operating and short-circuit processes in electrical power supply systems, as well as the assessment of the load on electrical operating equipment.
Teaching and Learning Forms	2 hours per week of lectures, 1 hour per week of exercises, 1 hour per week of practical lab courses, and self-study.
Prerequisites for Participation	The competencies to be acquired in the module Fundamentals of Electrical Power Supply Systems are required.
Usability	The module is a compulsory module in the main study program of the specialization Electrical Power Engineering in the diploma program Electrical Engineering. Furthermore, it is an elective module in the elective orientation area according to § 6 paragraph 3 SO and § 33 paragraph 3 PO of the main study program in the diploma program Renewable Energy Systems. It creates the prerequisites for the modules that list this module in the field "Prerequisites for Participation."
Prerequisites for the Award of Credit Points	Credit points are awarded when the module examination is passed. The module examination consists of a written exam lasting 120 minutes and a complex assignment with a workload of 30 hours.
Credit Points and Grades	5 credit points can be earned through the module. The module grade is determined by the weighted average of the grades of the examination components. The written exam is weighted twice, and the complex assignment is weighted once.
Frequency of the Module	The module is offered every summer semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.