

Module Name	Fundamentals of Electrical Power Supply Systems
Module Number	Eul-ET-C-GLEVS (Eul-RES-C-GLEVS)
Responsible Lecturer	Prof. Dr.-Ing. habil. Martin Wolter martin.wolter@tu-dresden.de
Qualification Objectives	After completing the module, students are able to create and apply models for equipment in electrical power supply systems. They have the competence to determine the parameters of the most important equipment based on geometric data, manufacturer specifications, or through measurements. Students are familiar with the fundamentals of dimensioning electrical installations.
Contents	The module covers the functionality, parameter determination, and modeling of all major equipment in electrical supply networks, simplified methods for calculating current and voltage distribution, as well as fundamental aspects of the design and dimensioning of electrical installations.
Teaching and Learning Forms	3 hours per week of lectures, 2 hours per week of exercises, and self-study.
Prerequisites for Participation	The competencies to be acquired in the module Electrical Power Engineering are required.
Usability	The module is a compulsory module in the main study phase of the specialization Electrical Power Engineering in the diploma program Electrical Engineering and a compulsory module in the main study phase of 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 180 minutes.
Credit Points and Grades	5 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.
Frequency of the Module	The module is offered every winter semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.