

Module Name	Electromagnetic Compatibility
Module Number	Eul-ET-E-EMV, Eul-BMT-E-EMV, Eul-RES-E-EMV
Responsible Lecturer	Prof. Dr. rer. nat. habil. Hans Georg Krauthäuser hans_georg.krauthaeuser@tu-dresden.de
Qualification Objectives	After completing the module, students have the competence to theoretically and practically address issues related to Electromagnetic Compatibility (EMC). They are familiar with the legal framework within the European Union and are acquainted with the most important standards. Students can identify potential coupling paths for undesired electromagnetic interference and are able to select and evaluate possible countermeasures.
Contents	The module covers topics and issues related to the EMC of technical systems.
Teaching and Learning Forms	2 hours per week of lectures, 1 hour per week of seminars, 1 hour per week of practical lab courses, and self-study.
Prerequisites for Participation	The competencies to be acquired in the modules Basics of Electrical Engineering, Electric and Magnetic Fields, and Dynamic Networks are required.
Usability	The module is an elective module in the elective area "Competence Deepening" according to § 6 Paragraph 3 SO and § 33 Paragraph 4 PO of the main study program in the field of Electrical Power Engineering in the diploma program Electrical Engineering. Furthermore, it is an elective module in the elective area "Competence Deepening" according to § 6 Paragraph 3 SO and § 33 Paragraph 3 PO of the main study program in the diploma program Renewable Energy Systems. Additionally, it is an elective module in the elective area "Biomedical-Technical Deepening" according to § 6 Paragraph 3 SO and § 33 Paragraph 3 PO of the main study program in the diploma program Biomedical Engineering. 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 portfolio with a total workload of 9 hours and a non-public oral examination as an individual examination lasting 30 minutes.
Credit Points and Grades	5 credit points can be earned through the module. The module grade is determined by the unweighted average of the grades of the examination components.
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.