

Module name	<b>Electronic Systems Design</b>
Module number	Eul-ET-C-GE, Eul-BMT-C-GE, Eul-MT-C-GE, Eul-RES-C-GE
Lecturer in charge	Prof. Dr.-Ing. habil. Jens Lienig jens.lienig@tu-dresden.de
Objectives	After completing the module, students will have acquired basic knowledge of the design and development of electronic assemblies and devices. They will have an understanding of engineering tasks and the various requirements to be taken into account. As a result, students are able to take an engineering approach to the development and design of these products, taking into account all relevant aspects.
Contents	The module covers design fundamentals such as technical representation, circuit diagram creation and CAD, as well as focusing on device design and device requirements, reliability of electronic devices, thermal dimensioning and electromagnetic compatibility (EMC).
Modes of teaching and learning	2 hours per week lectures, 2 hours per week exercises and self-study.
Prerequisites	There are no special prerequisites.
Usability	The module is a compulsory module in the basic studies of the degree programmes Electrical Engineering, Biomedical Engineering, Mechatronics and Renewable Energy Systems. It creates the prerequisites for the modules that list that module in the "Prerequisites" field.
Requirements for the award of credit points	The credit points are awarded when the module assessment is passed. The module assessment consists of a written exam of 120 minutes.
Credit points and grades	5 credit points can be obtained by the module. The module grade is the grade of the examination.
Frequency	The module is offered every summer semester.
Workload	The total effort is 150 hours.
Duration	The module takes one semester.