

Module Name	Integrated Analogue Circuits
Module Number	Eul-ET-C-IAS, Eul-BMT-E-IAS
Responsible Lecturer	Prof. Dr. sc. techn. Frank Ellinger frank.ellinger@tu-dresden.de
Qualification Objectives	After completing the module, students are familiar with the fundamental properties of components and circuits, such as temperature dependencies, nonlinearities, noise, and matching, as well as important functional blocks of integrated analog circuits. They are capable of performing symbolic analyses, dimensioning circuits, and designing analog circuits.
Contents	The module covers integrated analog circuits, such as reference sources, transconductance amplifiers, analog switches, mixers, switched-capacitor (SC) circuits, and functional circuits.
Teaching and Learning Forms	2 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 Circuit Design are required.
Usability	The module is a compulsory module in the main study program for the fields of Information Technology and Microelectronics in the diploma program Electrical Engineering. Furthermore, it is an elective module in the elective area Biomedical-Technical Specialization 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 written exam lasting 120 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 summer semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.