

Module Name	Acoustics
Module Number	Eul-ET-C-Acoust
Responsible Lecturer	Prof. Dr.-Ing. habil. Ercan Altinsoy ercan.altinsoy@tu-dresden.de
Qualification Objectives	After completing the module, students have the competence to dimension machines, equipment, systems, and consumer goods from an acoustic perspective and to design them in an environmentally friendly manner for the user. They apply their acquired knowledge, for example, in hearing aid development, the conception of acoustic reproduction methods, or in signal coding.
Contents	The contents of the module include Physical Acoustics, Hearing Acoustics, Electroacoustics, and Room Acoustics. This includes physical and psychoacoustic basic quantities of acoustics, description and measurement of acoustic events, electroacoustic transducers, and fundamental principles of auditory perception.
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 modules Multidimensional Differential and Integral Calculus as well as Partial Differential Equations and Probability Theory are required.
Usability	The module is a compulsory module of the main study program in the field of Information Technology in the diploma program Electrical 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 winter semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.