

Module Name	Communication Networks
Module Number	Eul-ET-C-CN
Responsible Lecturer	Prof. Dr.-Ing. Dr. h. c. Frank H.P. Fitzek frank.fitzek@tu-dresden.de
Qualification Objectives	After completing the module, students master circuit switching and packet switching methods, layered protocols, and can evaluate static and statistical multiplexing methods. They have become familiar with TCP/IP and CSMA/CD as examples. They are acquainted with fundamental methods of network design.
Contents	The module covers the principles of message switching in communication networks, the architectures of communication networks in wired, wireless, and optical technologies, and the communication protocols of the OSI layer model. Media access methods, multiplexing techniques, and ATM transmission technology are introduced.
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 Communications Engineering and Systems 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 150 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.