

Module name	<b>Dynamic Networks</b>
Module number	Eul-ET-C-DNW, Eul-BMT-C-DNW, Eul-IST-C-DNW, Eul-MT-C-DNW, Eul-RES-C-DNW
Lecturer in charge	Prof. Dr. phil. nat. habil. Ronald Tetzlaff ronald.tetzlaff@tu-dresden.de
Objectives	After completing the module, students will know methods for analyzing linear dynamic circuits when excited with periodic signals or in the transition behavior of stationary states. They are able to describe, model and calculate linear two-ports. They can determine the transfer function, analyze and graphically represent the behavior in the frequency range and calculate simple filters. They will know pointer representations and locus curves.
Contents	The content of the module is the calculation of linear dynamic networks.
Modes of teaching and learning	2 hours per week lectures, 2 hours per week exercises and self-study.
Prerequisites	The skills to be acquired in the modules <b>Basics of Electrical Engineering, Calculus for Functions with Several Variables</b> and <b>Electric and Magnetic Fields</b> are required.
Usability	The module is a compulsory module in the basic studies of the degree programmes Electrical Engineering, Biomedical Engineering, Information Systems 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 150 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 winter semester.
Workload	The total effort is 150 hours.
Duration	The module takes one semester.