

Module Name	Electronic Packaging
Module Number	Eul-ET-C-AVTdE
Responsible Lecturer	Prof. Dr.-Ing. Juliana Panchenko juliana.panchenko@tu-dresden.de
Qualification Objectives	After completing the module, students possess specialized knowledge, skills, and practical expertise in the assembly of packaged and unpackaged electronic components as well as in the production of wiring carriers. Furthermore, they are able to apply the theoretical principles of material-joining techniques such as bonding, soldering, and adhesive bonding, as well as subtractive and additive structuring techniques for wiring carriers. They are familiar with the technologies and equipment used for these processes.
Contents	The module covers trends in electronic packaging and interconnection technology, packaging and interconnection techniques for semiconductor components, assembly technologies for semiconductor components, thin-film wiring carrier technologies, thick-film wiring carrier technologies, printed circuit board technologies, surface techniques for electronic components, and optical interconnection techniques for printed circuit boards.
Teaching and Learning Forms	2 hours per week of lectures, 2 hours per week of practical lab courses, and self-study.
Prerequisites for Participation	The competencies to be acquired in the modules "Electronics Technology Lab" and "Electronic Systems Design" are required.
Usability	The module is a compulsory module of the main study program in the field of Microelectronics 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 90 minutes and a complex assignment with a workload of 12 hours.
Credit Points and Grades	5 credit points can be earned through the module. The module grade is determined by the weighted average of the grades of the examination components. The written exam is weighted twice, and the complex assignment is weighted once.
Frequency of the Module	The module is offered every academic year, starting in the winter semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts two semesters.