

Only the german version of the module description as part of the study regulations is legally binding.

Module name	Computer science and society
Module number	INF-25-Ba-luG
Responsible lecturer	Dean of Studies of the Faculty of Computer Science studiendekan.inf@tu-dresden.de
Qualification objectives	Students have the competence to evaluate the changes brought about by the use of information technology and computer science methods in society with regard to the opportunities and risks . Students are able to support the conscious and responsible design of information technology systems. They know the legal and regulatory effects on the field of information technology. Students will be able to analyze barriers and assess their impact on users of interactive systems. They are able to support communication systems for people with disabilities. Students can evaluate data protection and data security risks from a social perspective and are able to develop problem-specific proposals for a sensible balance between data protection and data security and other social interests. They are familiar with the effects of digitalization on the climate and environment and can design climate and environmentally friendly IT systems as well as relate the fundamental rights of the Basic Law to the ethical codes of the professional associations (Code of Ethics) and evaluate the social responsibility of computer science for the future design of fundamental rights.
Content	The module covers topics with interactions between society and IT. These are codes of ethics of professional associations and the protection of personal data as well as climate relevant aspects. Further content includes the avoidance of barriers in interactive systems. These include e-learning platforms, digital collections or document formats, analysis of the resource consumption of IT systems as well as discussions on the dangers and opportunities of digitalization for the climate and the environment, the structure and fundamental rights of the German Basic Law, including the historical contexts and the impact of IT on fundamental rights and their connection with the ethics codes of IT.
Teaching and learning methods	The module comprises lectures of 1 SWS, practicals of 1 SWS and self study. The language of instruction for lectures and practicals is German.
Prerequisites for participation	In the Diploma degree program in Computer Science, the Bachelor's degree program in Computer Science and the Bachelor's degree program in Applied Computer Science, the competencies to be acquired in the modules INF-25-Ba-Prg Programming and RoboLab, INF-25-Ba-GTI Fundamentals of Computer Engineering, INF-25-Ba-MCI Fundamentals of Human-Computer Interaction and INF-25-Ba-SK Key Competencies are required.
Applicability	The module is a compulsory module in the Diploma degree program in Computer Science. The module is a compulsory module in the Bachelor's degree course in Computer Science and in the Bachelor's degree course

	in Applied Computer Science. The module creates the prerequisites for the modules that name it among the prerequisites for participation .
Requirements for earning credit points	The credit points are earned if the module examination is passed. The module examination consists of a portfolio of 30 hours. The examination language is German.
Credit points and grades	3 credit points can be earned through the module. The module grade corresponds to the grade of the examination.
Module frequency	The module is offered every summer semester.
Workload	The total workload is 90 hours.
Module duration	The module comprises one semester.
Accompanying literature	Helmuth James von Moltke 1907-1945. A biography, Gerhard Brakelmann. Published by C. H. Beck, 2007. IBM and the Holocaust, Edwin Black. Dialog Press, 2012. See also: https://de.wikipedia.org/wiki/IBM_und_der_Holocaust . The Universal Access Handbook, Constantine Stephanidis. CRC Press, 2009.