

Vertiefungsempfehlung Elektronische, Optoelektronische und Hybride Bauelemente
für den Kernbereich Microelectronics and Nanoelectronics

Empfohlene Kernmodule

Modul-Nr.	Modulname	Semester	Credits
EI70710	Advanced Electronic Devices	SS	5
EI70720	Bauelemente der Mikro- und Leistungselektronik	WS	5
EI70730	Memory Technology for Data Storage	WS/SS	5
EI70740	Nanotechnology for Energy Systems	WS	5
CIT4430005	Photonic Quantum Technologies	WS/SS	5
EI70760	Simulation of Quantum Devices	SS	5

Empfohlene Wahlmodule

Modul-Nr.	Modulname	Semester	Credits
CIT4430015	Analog and Mixed Signal Circuit Design (<i>vom Kernbereich Electronic Circuits and Systems</i>)	WS	5
EI7523	Analoge Bipolartechnik: Bauelemente, Simulation und Schaltungen	WS	3
EI7626	Halbleiter Ober- und Grenzflächen	SS	5
CIT4430008	Hochfrequenz-Elektronik	SS	3
EI7581	Inside my iPhone - Technology Analysis of a Smart Phone	WS/SS	6
EI7355	Nanosystems	WS/SS	5
EI71062	Optoelectronics	SS	5
EI73751	Quantum Nanoelectronics	SS	5
EI71066	Simulation of Semiconductor Properties	SS	5

Empfohlene Praktika

Modul-Nr.	Modulname	Semester	Credits
EI7488	3D Printing for Bioelectronics and Biomedical Applications	SS	6
EI7469	Computational Photonics Laboratory	WS	5
EI78037	Fabrication and Characterization of Quantum-LEDs	WS/SS	5
EI78060	Lab CMOS A/D-Converter Design	WS	6
EI78064	Lab CMOS Voltage Regulation Circuit Design	SS	6
CIT4410005	Memristive Memory Technology	WS/SS	6
EI7482	Nano-Optoelectronic Joint Simulation/Experimental Lab	SS	5
EI78032	Praktikum "Design und Simulation von Mikroelektromechanischen Systemen (MEMS)"	WS/SS	6
EI78071	Projektpraktikum Nanomagnetische Bauelemente	WS/SS	6
EI78036	Quantum Key Distribution	WS/SS	5

Empfohlene wissenschaftliche Seminare

Modul-Nr.	Modulname	Semester	Credits
EI7763	Advanced Seminar on Hybrid Electronic Systems	WS/SS	5
EI77006	Current Topics in Photonic Quantum Technologies	WS/SS	5
CIT4420002	Seminar Biomolecular Electronics	WS/SS	5
EI7775	Seminar Computational Photonics and Nanoelectronics	WS/SS	5
EI7770	Seminar Elektrophysikalische Probleme in der Mikrostrukturtechnik	WS/SS	5