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Field of specialization 26: Applied Superconductors Engineering

Below you find a list of recommended elective modules from the immediate environment of the specialization. If you would like to broaden your knowledge further, other modules than those can be chosen as well in consultation with the program consultants. In this respect, it is strongly recommended to consult the program consultant already at the beginning of the Master's program in order to discuss your individual study plan.

Recommended elective modules:

| Recommended elective modules for specialization | WS | | SS | |
|--|-----|----|-----|----|
| | SWS | LP | SWS | LP |
| Cryogenic Engineering (CIW) | 2+1 | 6 | | |
| Detektoren für die Astronomie und Raumfahrt | 2 | 3 | | |
| Einführung in die Quantentheorie für Elektrotechniker | 3 | 4 | | |
| Electric Power Transmission & Grid Control | | | 2+2 | 6 |
| Electromagnetics and Numerical Calculation of Fields | 2+1 | 4 | | |
| Fusionstechnologie A (MACH)* | 2+2 | 4 | | |
| Fusionstechnologie B (MACH)* | | | 2+2 | 4 |
| Hochspannungstechnik | 2+1 | 6 | | |
| Kältetechnik B – Grundlagen der industriellen Gasgewinnung (CIW) | | | 2+1 | 6 |
| Lab Course on Noise Thermometry | 4 | 6 | 4 | 6 |
| Magnet-Technologie für Fusionsreaktoren (MACH)* | | | 2 | 4 |
| Mikrosystemtechnik | 2 | 3 | | |
| Miniaturisierte passive Mikrowellenschaltungen | 2+1 | 4 | | |
| NMR-Methoden zur Produkt- und Prozessanalyse (CIW) | 2 | 4 | | |
| Physical Foundations of Cryogenics (CIW) | | | 2+1 | 6 |
| Physics, Technology and Applications of Thin Films | 2+1 | 4 | | |
| Power Electronics | | | 2+2 | 6 |
| Praxis elektrischer Antriebe | 2+1 | 4 | | |
| Signal Processing Methods | 2+2 | 6 | | |
| Single-Photon Detectors | 2+1 | 3 | | |
| Superconducting Nanowire Detectors | | | 2+1 | 4 |
| Vakuumtechnik (CIW) | 2+1 | 6 | | |
| Verfahren zur Kanalcodierung | | | 2 | 3 |

* Available as Teilleistung (course) only. Please contact ETIT Program Service Master (master-info@etit.kit.edu) for recognition.