Fall Semester (MA1/MA3)

: Engineering courses

Code 6XX: advanced courses

	Astrophysics, Particles, High energy Physics	Plasma Physics and Energy	Physics of Biological and Complex Systems	Condensed Matter Physics	Quantum Science and Technology
6 ECTS	Quantum Field Theory I - 431 Relativity Cosmology I - 427 Quantum Physics III - 425 Machine Learning Physics - 467	Plasma I - 423 Machine Learning Physics - 467	Statistical Physics III - 435 Machine Learning Physics - 467	Adv. Solid State Physics I - 419 Quantum Physics III - 425 Machine Learning Physics - 467	QED & Quantum Optics - 453 Adv. Solid State Physics I - 419 Quantum Computing - 541 Machine Learning Physics - 467
4 ECTS	Astrophysics III - 401 Particle Physics I - 415 Intr. Particle Accelerators - 448 Particle detection - 440 Computer simulation - 403 Design of Experiments - 442	Nucl. Fusion&Plasma Physics - 445 Neutron scattering – 640 Microwave Eng. - QUANT 410 Radiation biology - 450 Particle detection - 440 Computer simulation - 403 Radiation detection - 452	Radiation biology - 450 Stat. Ph. biomacromolecul. - 441 Biophysics: biol. sys. - 302 Stat. Phys. Computation - 512 Computer simulation - 403 Design of Experiments - 442	Semiconductor Physics - 433 Physics of Materials - 307 Microwave Eng. - QUANT 410 Neutron scattering – 640 Computer simulation - 403 Quantum transport - 462 Design of Experiments - 442	Semiconductor Physics - 433 Lasers - MICRO 422 Quantum transport - 462 Microwave Eng. - QUANT 410 Math of quantum Physics - 469 Computer simulation - 403 Design of Experiments - 442
3 ECTS				Exp. methods in Physics. - 405 Frontiers in NanoSciences - 407	Exp. methods in Physics - 405 Frontiers in NanoSciences - 407