

| | |
|---|------------|
| 13.132. Quantum Machine Learning - M-ETIT-105889 | 301 |
| 13.133. Quellencodierung - M-ETIT-105273 | 303 |
| 13.134. Regelung leistungselektronischer Systeme - M-ETIT-105915 | 304 |
| 13.135. Regelung linearer Mehrgrößensysteme - M-ETIT-100374 | 305 |
| 13.136. Roboterpraktikum - M-INFO-102522 | 306 |
| 13.137. Robotik I - Einführung in die Robotik - M-INFO-100893 | 307 |
| 13.138. Robotik II - Humanoide Robotik - M-INFO-102756 | 308 |
| 13.139. Satellitengeodäsie für Ingenieure - M-BGU-104571 | 309 |
| 13.140. Schaltungstechnik in der Industrielektronik - M-ETIT-100399 | 311 |
| 13.141. Seminar Ausgewählte Kapitel der Nachrichtentechnik - M-ETIT-100441 | 312 |
| 13.142. Seminar Barrierefreiheit - Assistive Technologien für Sehgeschädigte - M-INFO-102374 | 313 |
| 13.143. Seminar Batterien II - M-ETIT-105321 | 314 |
| 13.144. Seminar Brennstoffzellen II - M-ETIT-105322 | 315 |
| 13.145. Seminar Eingebettete Systeme - M-ETIT-100455 | 316 |
| 13.146. Seminar Elektrokatalyse - M-ETIT-105629 | 317 |
| 13.147. Seminar Neue Komponenten und Systeme der Leistungselektronik - M-ETIT-100396 | 318 |
| 13.148. Seminar Sensorik - M-ETIT-100380 | 320 |
| 13.149. Seminar über Quantentechnologische Detektoren und Sensoren - M-ETIT-105607 | 321 |
| 13.150. Sensoren - M-ETIT-100378 | 322 |
| 13.151. Sichere Mensch-Roboter-Kollaboration - M-INFO-104877 | 323 |
| 13.152. Signalverarbeitung in der Nachrichtentechnik - M-ETIT-100443 | 325 |
| 13.153. Software Engineering - M-ETIT-100450 | 326 |
| 13.154. Steuerungstechnik - M-MACH-105348 | 327 |
| 13.155. Stochastische Informationsverarbeitung - M-INFO-100829 | 328 |
| 13.156. Stromrichtersteuerungstechnik - M-ETIT-100400 | 329 |
| 13.157. Systemintegration und Kommunikationsstrukturen in Industrie 4.0 und IoT - M-ETIT-106026 | 330 |
| 13.158. Team Project: Sensors and Electronics - M-ETIT-105465 | 332 |
| 13.159. Technische Akustik - M-ETIT-101835 | 333 |
| 13.160. Technische Optik - M-ETIT-100538 | 334 |
| 13.161. Telematik - M-INFO-100801 | 336 |
| 13.162. Test eingebetteter Systeme im industriellen Umfeld - M-ETIT-100546 | 338 |
| 13.163. Theoretische Grundlagen der Kryptographie - M-INFO-105584 | 339 |
| 13.164. Thermische Solarenergie - M-MACH-102388 | 340 |
| 13.165. Überfachliche Qualifikationen - M-ETIT-105803 | 342 |
| 13.166. Ultraschall-Bildgebung - M-ETIT-100560 | 343 |
| 13.167. Universal Composability in der Kryptographie - M-INFO-105783 | 344 |
| 13.168. Vakuumtechnik - M-CIWT-104478 | 345 |
| 13.169. Verifizierte numerische Methoden - M-ETIT-104493 | 346 |
| 13.170. Verteilte ereignisdiskrete Systeme - M-ETIT-100361 | 347 |
| 13.171. Visuelle Wahrnehmung im KFZ - M-ETIT-100497 | 348 |
| 13.172. Werkzeugmaschinen und Handhabungstechnik - M-MACH-101286 | 349 |
| 13.173. Wissenschaftliches Programmieren für Ingenieure - M-MACH-105369 | 350 |
| 13.174. Workshop Finite Elemente Methode in der Elektromagnetik - M-ETIT-100555 | 352 |
| 14. EN Modules in English..... | 353 |
| 14.1. Adaptive Optics - M-ETIT-103802 | 353 |
| 14.2. Advanced Artificial Intelligence - M-INFO-106299 | 355 |
| 14.3. Automotive Vision - M-MACH-102693 | 356 |
| 14.4. Business Innovation in Optics and Photonics - M-ETIT-101834 | 358 |
| 14.5. Channel Coding: Algebraic Methods for Communications and Storage - M-ETIT-105616 | 359 |
| 14.6. Channel Coding: Graph-Based Codes - M-ETIT-105617 | 360 |
| 14.7. Communication Systems and Protocols - M-ETIT-100539 | 361 |
| 14.8. Communications Engineering II - M-ETIT-105274 | 362 |
| 14.9. Computational Imaging - M-INFO-106190 | 363 |
| 14.10. Cryogenic Engineering - M-CIWT-104356 | 364 |
| 14.11. Cyber Physical Production Systems - M-ETIT-106039 | 365 |
| 14.12. Deep Learning for Computer Vision I: Basics - M-INFO-105753 | 367 |
| 14.13. Deep Learning for Computer Vision II: Advanced Topics - M-INFO-105755 | 368 |
| 14.14. Digital Hardware Design Laboratory - M-ETIT-102266 | 369 |
| 14.15. Digital Signal Processing in Optical Communications – with Practical Exercises - M-ETIT-103450 | 371 |
| 14.16. Digital Twin Engineering - M-ETIT-106040 | 372 |

| | |
|---|-----|
| 14.17. Electric Power Generation and Power Grid - M-ETIT-101917 | 374 |
| 14.18. Electric Power Transmission & Grid Control - M-ETIT-105394 | 375 |
| 14.19. Electrocatalysis - M-ETIT-105883 | 376 |
| 14.20. Electromagnetics and Numerical Calculation of Fields - M-ETIT-100386 | 377 |
| 14.21. Energy Storage and Network Integration - M-ETIT-101969 | 379 |
| 14.22. Energy Systems Analysis - M-WIWI-100499 | 381 |
| 14.23. Fabrication and Characterisation of Optoelectronic Devices - M-ETIT-101919 | 382 |
| 14.24. Field Propagation and Coherence - M-ETIT-100566 | 384 |
| 14.25. Hardware Modeling and Simulation - M-ETIT-100449 | 386 |
| 14.26. Information Processing in Sensor Networks - M-INFO-100895 | 387 |
| 14.27. Interdisciplinary Qualifications - M-ETIT-105803 | 388 |
| 14.28. Introduction to Automotive and Industrial Lidar Technology - M-ETIT-105461 | 389 |
| 14.29. Lab Course on Nanoelectronics - M-ETIT-100468 | 390 |
| 14.30. Lab Course on Noise Thermometry - M-ETIT-106263 | 391 |
| 14.31. Lab course on superconducting materials - M-ETIT-105614 | 392 |
| 14.32. Lab Course on Superconducting Quantum Electronics - M-ETIT-105605 | 393 |
| 14.33. Laboratory Lighting Technology - M-ETIT-102356 | 394 |
| 14.34. Laboratory Modern Software Tools in Power Engineering - M-ETIT-105402 | 395 |
| 14.35. Laboratory Nanotechnology - M-ETIT-100478 | 396 |
| 14.36. Laboratory Optoelectronics - M-ETIT-100477 | 397 |
| 14.37. Laboratory Solar Energy - M-ETIT-102350 | 398 |
| 14.38. Laser Metrology - M-ETIT-100434 | 399 |
| 14.39. Laser Physics - M-ETIT-100435 | 401 |
| 14.40. Liberalised Power Markets - M-WIWI-105403 | 403 |
| 14.41. Light and Display Engineering - M-ETIT-100512 | 405 |
| 14.42. Lighting Design - Theory and Applications - M-ETIT-100577 | 407 |
| 14.43. Machine Learning and Optimization in Communications - M-ETIT-104988 | 409 |
| 14.44. Machine Vision - M-MACH-101923 | 410 |
| 14.45. Measurement Technology - M-ETIT-105982 | 413 |
| 14.46. Microwave Engineering - M-ETIT-100535 | 415 |
| 14.47. Mixed-Signal IC Design - M-ETIT-105893 | 416 |
| 14.48. MMIC Design Laboratory - M-ETIT-105464 | 418 |
| 14.49. Mobile Communications - M-ETIT-105971 | 419 |
| 14.50. Mobile Communications II - M-ETIT-106244 | 420 |
| 14.51. Modeling and Simulation - M-MACH-102592 | 421 |
| 14.52. Modern Radio Systems Engineering - M-ETIT-100427 | 422 |
| 14.53. Nano- and Quantum Electronics - M-ETIT-105604 | 423 |
| 14.54. Navigation and Localization Techniques - M-ETIT-105881 | 425 |
| 14.55. NMR Methods for Product and Process Analysis - M-CIWT-105890 | 427 |
| 14.56. Nonlinear Optics - M-ETIT-100430 | 428 |
| 14.57. Numerical Methods - M-MATH-105831 | 430 |
| 14.58. Optical Design Lab - M-ETIT-100464 | 431 |
| 14.59. Optical Engineering - M-ETIT-100456 | 432 |
| 14.60. Optical Networks and Systems - M-ETIT-103270 | 434 |
| 14.61. Optical Systems in Medicine and Life Science - M-ETIT-103252 | 436 |
| 14.62. Optical Transmitters and Receivers - M-ETIT-100436 | 438 |
| 14.63. Optical Waveguides and Fibers - M-ETIT-100506 | 440 |
| 14.64. Optimization of Dynamic Systems - M-ETIT-100531 | 442 |
| 14.65. Optoelectronic Components - M-ETIT-100509 | 443 |
| 14.66. Photonic Integrated Circuit Design and Applications - M-ETIT-105914 | 445 |
| 14.67. Photonics and Communications Lab - M-ETIT-104485 | 447 |
| 14.68. Physical and Data-Based Modelling - M-ETIT-105468 | 448 |
| 14.69. Physical Foundations of Cryogenics - M-CIWT-103068 | 450 |
| 14.70. Physics, Technology and Applications of Thin Films - M-ETIT-105608 | 451 |
| 14.71. Plastic Electronics / Polymerelectronics - M-ETIT-100475 | 452 |
| 14.72. Power Electronics - M-ETIT-104567 | 453 |
| 14.73. Practical Course: Smart Energy System Lab - M-INFO-105955 | 454 |
| 14.74. Pulsed Power Technology and Applications (Lecture) - M-ETIT-105595 | 455 |
| 14.75. Pulsed Power Technology and Applications (Tutorial) - M-ETIT-105596 | 456 |
| 14.76. Quantum Detectors and Sensors - M-ETIT-105606 | 458 |

| | |
|--|------------|
| 14.77. Radar Systems Engineering - M-ETIT-100420 | 459 |
| 14.78. Radiation Protection - M-ETIT-100562 | 460 |
| 14.79. Radio Frequency Integrated Circuits and Systems - M-ETIT-105123 | 462 |
| 14.80. Radio-Frequency Electronics - M-ETIT-105124 | 463 |
| 14.81. Renewable Energy-Resources, Technologies and Economics - M-WIWI-100500 | 464 |
| 14.82. Robotics - Practical Course - M-INFO-102522 | 465 |
| 14.83. Robotics I - Introduction to Robotics - M-INFO-100893 | 466 |
| 14.84. Robotics II - Humanoid Robotics - M-INFO-102756 | 467 |
| 14.85. Robotics III - Sensors and Perception in Robotics - M-INFO-104897 | 468 |
| 14.86. Satellite Communications - M-ETIT-105272 | 469 |
| 14.87. Seminar Battery II - M-ETIT-105321 | 470 |
| 14.88. Seminar Fuel Cell II - M-ETIT-105322 | 471 |
| 14.89. Seminar Novel Concepts for Solar Energy Harvesting - M-ETIT-103447 | 472 |
| 14.90. Seminar on Applied Superconductivity - M-ETIT-105615 | 473 |
| 14.91. Seminar Radar and Communication Systems - M-ETIT-100428 | 474 |
| 14.92. Single-Photon Detectors - M-ETIT-101971 | 475 |
| 14.93. Solar Energy - M-ETIT-100524 | 476 |
| 14.94. Space-Born Microwave Radiometry - Advanced Methods and Applications - M-ETIT-100545 | 478 |
| 14.95. Spaceborne Radar Remote Sensing - M-ETIT-103042 | 479 |
| 14.96. Student Innovation Lab - M-ETIT-105073 | 481 |
| 14.97. Superconducting Magnet Technology and Power Systems - M-ETIT-105705 | 484 |
| 14.98. Superconducting Materials - M-ETIT-105521 | 486 |
| 14.99. Superconducting Nanowire Detectors - M-ETIT-105609 | 488 |
| 14.100. Superconductivity for Engineers - M-ETIT-105611 | 489 |
| 14.101. Systems and Software Engineering - M-ETIT-100537 | 491 |
| 14.102. Systems Engineering for Automotive Electronics - M-ETIT-100462 | 492 |
| 14.103. Wearable Robotic Technologies - M-INFO-103294 | 493 |
| 15. DE/EN Teilleistungen/Courses..... | 494 |
| 15.1. Adaptive Optics - T-ETIT-107644 | 494 |
| 15.2. Aktuelle Themen der Solarenergie - T-ETIT-100780 | 495 |
| 15.3. Angewandte Informationstheorie - T-ETIT-100748 | 496 |
| 15.4. Antennen und Mehrantennensysteme - T-ETIT-106491 | 497 |
| 15.5. Anziehbare Robotertechnologien - T-INFO-106557 | 498 |
| 15.6. Aufbau- und Verbindungstechnik für leistungselektronische Systeme - T-ETIT-104518 | 499 |
| 15.7. Authentisierung und Verschlüsselung - T-INFO-110824 | 500 |
| 15.8. Batterie- und Brennstoffzellensysteme - T-ETIT-100704 | 501 |
| 15.9. Batterien und Brennstoffzellen - T-ETIT-100983 | 502 |
| 15.10. Bildgebende Verfahren in der Medizin I - T-ETIT-101930 | 503 |
| 15.11. Bildgebende Verfahren in der Medizin II - T-ETIT-101931 | 504 |
| 15.12. Bildverarbeitung - T-ETIT-105566 | 505 |
| 15.13. Bioelektrische Signale - T-ETIT-101956 | 506 |
| 15.14. Biologisch Motivierte Robotersysteme - T-INFO-101351 | 507 |
| 15.15. Biomedizinische Messtechnik I - T-ETIT-106492 | 508 |
| 15.16. Biomedizinische Messtechnik II - T-ETIT-106973 | 509 |
| 15.17. BioMEMS - Mikrosystemtechnik für Life-Sciences und Medizin I - T-MACH-100966 | 510 |
| 15.18. BioMEMS - Mikrosystemtechnik für Life-Sciences und Medizin II - T-MACH-100967 | 511 |
| 15.19. BioMEMS - Mikrosystemtechnik für Life-Sciences und Medizin III - T-MACH-100968 | 512 |
| 15.20. Business Innovation in Optics and Photonics - T-ETIT-104572 | 513 |
| 15.21. Channel Coding: Algebraic Methods for Communications and Storage - T-ETIT-111244 | 514 |
| 15.22. Channel Coding: Graph-Based Codes - T-ETIT-111245 | 515 |
| 15.23. Communication Systems and Protocols - T-ETIT-101938 | 516 |
| 15.24. Computational Imaging - T-INFO-112573 | 517 |
| 15.25. Computational Intelligence - T-MACH-105314 | 518 |
| 15.26. Cryogenic Engineering - T-CIWVT-108915 | 519 |
| 15.27. Cyber Physical Production Systems - T-ETIT-112223 | 520 |
| 15.28. Das Arbeitsfeld des Ingenieurs - T-MACH-105721 | 521 |
| 15.29. Data Science I - T-INFO-111622 | 522 |
| 15.30. Data Science II - T-INFO-111626 | 523 |
| 15.31. Deep Learning für Computer Vision I: Grundlagen - T-INFO-111491 | 524 |
| 15.32. Deep Learning für Computer Vision II: Fortgeschrittene Themen - T-INFO-111494 | 525 |