List of Electives in MSNE recommended by Mentors && at least one MSNE Student attending (Last update: March 2023).
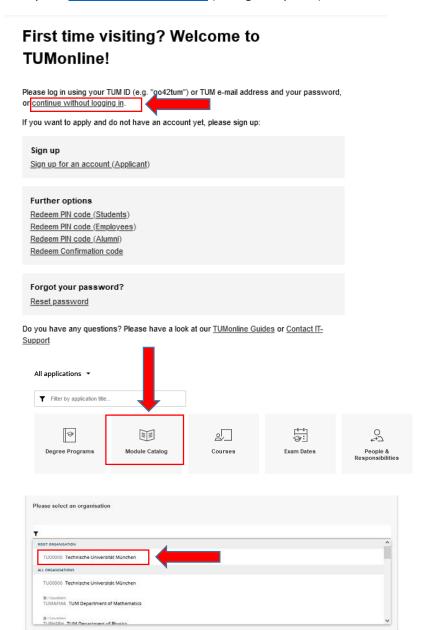
- [VK] [IN1503] Advanced Programming
- [VK] [WIB21003] Advanced Seminar Marketing, Strategy, Leadership & Management: Neurophysiological Methods for Organizational Research and Economics
- [VK] [MW2318] Angewandte Tensoralgebra für Ingenieure
- [VK] [EI7649] Approximate Dynamic Programming and Reinforcement Learning
- [VK] [IN2403] Artificial Intelligence in Medicine
- [VK] [POL60200] Artificial Intelligence in Theory and Practice
- [VK] [IN3200] Ausgewählte Themen aus dem Bereich Computergrafik und -vision
- [VK] [MA5430] Basic Concepts of Statistical Models on Graphs
- [VK] [CLA10602] Basic Techniques in Modelling Complex Systems
- [VK] [IN2138] Bewegungsplanung in der Robotik
- [VK] [IN2272] BGCE Compact Course
- [VK] [IN2015] Bildsynthese
- [VK] [EI7263] Biologically-Inspired Learning for Humanoid Robots
- [VK] [PH2002] Biomedizinische Physik 2
- [VK] [EI7473] BioMEMS and Microfluidics
- [VK] [MW2479] Bioprinting: Fundamentals and Applications
- [VK] [EI7474] Biosensors and Bioelectronics
- [VK] [EI78068] Block course Soft Microrobotics
- [VK] [EI73141] Brain, Mind and Cognition (Seminar)
- [VK] [IN2028] Business Analytics and Machine Learning
- [VK] [WZ2693] Cognitive Neuroscience
- [VK] [EI71004] Communication Acoustics
- [VK] [EI7646] Computational Neuroscience: Eine Ringvorlesung von Modellen bis zu Anwendungen
- [VK] [IN2319] Computational Physiology for Medical Image Computing
- [VK] [MA4402] Computational Statistics
- [VK] [IN2246] Computer Vision I: Variational Methods
- [VK] [IN2375] Computer Vision III: Detektion, Segmentierung und Tracking
- [VK] [EI74351] Convex Optimization
- [VK] [WZ2938] Course block: Neuroscience of vision
- [VK] [EI78043] Cybathlon Challenge: Mechanism Design & Control
- [VK] [EI78041] Cybathlon Challenge: Task Control & User Experiments
- [VK] [MW2426] Cyber-Physical Systems Lab: Autonomous Applications
- [VK] [WZ1711] Development Policy and Economics: Human Security and Human Development
- [VK] [MW1421] Dynamics of Mechanical Systems
- [VK] [MA3081] Dynamische Systeme
- [VK] [IN2003] Effiziente Algorithmen und Datenstrukturen
- [VK] [MW2373] Einführung in die nichtlineare Dynamik und Chaostheorie
- [VK] [EI78023] Electrode – Electrolyte Interfaces
- [VK] [EI7270] Elektromagnetische Felder in der Biomedizin und in medizinischen Anwendungen der Nanotechnik
- [VK] [IN2379] Fortgeschrittene Datenverarbeitungs- und Visualisierungstechniken
- [VK] [EI60022] Fundamentals of Mathematics for Neuroengineering
- [VK] [MW00127] Geheimnisschutz
- [VK] [MA4804] Geometrie und Topologie für die Datenanalyse
- [VK] [MW2395] Gestaltung und Zerlegung dynamischer Systeme
- [VK] [IN2062] Grundlagen der Künstlichen Intelligenz
- [VK] [ME702] Grundlegende Einführung in fortgeschrittene MRT und Analysetechniken für Neuro-Anwendungen
- [VK] [ME701] Grundlegende Einführung in konventionelle MRT und Analysetechniken für Neuro-Anwendungen
- [VK] [IN2124] Grundlegende Mathematische Methoden für Imaging und Visualisierung
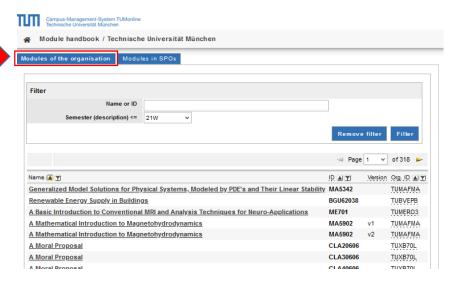- [VK] [SG860013] Human Robotics

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- [VK] [MEMA-STRB001] Humanbiologie
- [VK] [EI7210] Humanoid Robotic Systems
- [VK] [ME70003] Imaging Neuropsychiatry
- [VK] [CLA21213] Individual Change Management
- [VK] [IN2022] Informatikanwendungen in der Medizin II
- [VK] [EI7223] Information Retrieval in High Dimensional Data
- [VK] [W0002285] Innovative Entrepreneurs - Leadership of High-Tech Companies
- [VK] [ME562] Introduction to Biological Imaging
- [VK] [IN2346] Introduction to Deep Learning
- [VK] [MGT001299] Introduction to Deep Reinforcement Learning
- [VK] [MGT001243] Introduction to Statistics Using R
- [VK] [IN2409] Inverse Problems in Medical Imaging
- [VK] [IN2222] Kognitive Systeme
- [VK] [CLA30201] Komplexe Systeme
- [VK] [ED0153] Komplexe Systeme (vertieft)
- [VK] [IN2330] Konvexe Optimierung für Computer Vision
- [VK] [IN2377] Konzepte der C++-Programmierung
- [VK] [IN2323] Machine Learning for Graphs and Sequential Data
- [VK] [EI7104] Machine Learning: Methods and Tools
- [VK] [IN2064] Maschinelles Lernen
- [VK] [IN2357] Maschinelles Lernen für Computersehen
- [VK] [EI71102] Materials in Neuroengineering
- [VK] [IN22993] Medical Augmented Reality
- [VK] [IN9038] Medizintechnik Entrepreneurship
- [VK] [SG860006] Methods in Neuromechanics
- [VK] [SG861006] Methods in Neuromechanics
- [VK] [EI71059] Mixed Integer Programming and Graph Algorithms for Engineering Problems
- [VK] [MA4503] Moderne Methoden der Nichtlinearen Optimierung
- [VK] [EI60017] Modul A (Externe Leistung)
- [VK] [EI60023] Modul B (Externe Leistung)
- [VK] [EI60024] Modul C (Externe Leistung)
- [VK] [EI60025] Modul D (Externe Leistung)
- [VK] [EI60027] Modul E (Externe Leistung)
- [VK] [EI60028] Modul F (Externe Leistung)
- [VK] [EI71091] Nano- and Microrobotics
- [VK] [EI7355] Nanosystems
- [VK] [IN2361] Natural Language Processing
- [VK] [EI7776] Neuroelectronics Seminar
- [VK] [SG860012] Neuromuscular Control and Learning
- [VK] [EI70270] Neuroprosthetics
- [VK] [IN2405] Neuroprosthetics: Artificial Limbs
- [VK] [POL70074] Neuro-Technologien für Gesellschaft gestalten
- [VK] [W0012238] Never trust statistics unless you fiddled the figure yourself - Creative Data Management and Visualisation for Business & Economics
- [VK] [PH2027] Nichtlineare Dynamik und komplexe Systeme 1
- [VK] [PH2028] Nichtlineare Dynamik und komplexe Systeme 2
- [VK] [MA33305] Numerische Programmierung 1 (CSE)
- [VK] [W0010771] Patente und Geheimnisschutz
- [VK] [MW2450] Physikbasiertes Machine Learning
- [VK] [EI78066] Practical Course Wearable Robotics: Upper Limb Exoskeletons
- [VK] [MW0450] Praktikum Industrielle Softwareentwicklung für Ingenieure / C++
- [VK] [ED4029] Praktikum Software Engineering
- [VK] [W0011187] Private Equity
- [VK] [EI78052] Project Laboratory Neuroelectronics
- [VK] [EI7446] Projektpraktikum Biosignalverarbeitung und Modellierung
- [VK] [EI78046] Projektpraktikum Human-Centered Neuroengineering: Neurorehabilitation
- [VK] [EI7208] Projektpraktikum Kognitive Systeme
- [VK] [EI04024] Python for Engineering Data Analysis - From Machine Learning to Visualization
- [VK] [EI7471] Quantum Information Theory
- [VK] [EI78011] Ringpraktikum Neurosignale
- [VK] [IN2355] Robotic 3D Vision
- [VK] [IN2005] Scientific Computing I
- [VK] [BV400016] Selbständig wissenschaftlich Arbeiten
- [VK] [EI77551] Seminar Biomedizinische Elektronik
- [VK] [EI7768] Seminar Kognitive Systeme
- [VK] [EI77009] Seminar Machine Learning
- [VK] [WZ2682] Sensory and Behavioral Neurogenetics
- [VK] [EI7493] Signal Processing for Audio Technology
- [VK] [EI71068] Solving Inverse Problems with Deep Learning
- [VK] [W0011180] Tech Challenge
- [VK] [ED0140] Technikphilosophie
- [VK] [MW2098] Technische Dynamik
- [VK] [MW2245] Think. Make. Start.
- [VK] [MA5607] Topics in Computational Biology
- [VK] [ME70004] Translational Neuropsychiatry
- [VK] [CLA11123] Videos selber machen
- [VK] [MW2437] Virtual Reality in der Ergonomie
- [VK] [IN2026] Visual Data Analytics
- [VK] [CLA20563] Was hält eine Gesellschaft zusammen?
- [VK] [CLA10450] Wenn aus Ingenieuren Manager werden
- [VK] [IN8019] Wissenschaftliche Visualisierung
- [VK] [ED110068] Wissenschaftliches Programmieren und Dynamische Modellierung in Julia
- [VK] [ED0150] Wissenschaftstheorie (vertieft)

Lists and links to all TUM and MSNE modules (full text) → next page!

FR, 30.3.2023

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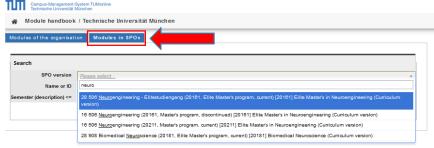
Kindly use https://campus.tum.de (no login required):

"Modules of the Organisation" (Default Tab) = List and links to **all modules existing at TUM**

Filtering for MSNE Context (= MSNE Mentors recommended at least once)
Use "Modules in SPOs" tab and edit in field "SPO-version" the keyword "neuro" and press <enter>

Existing modules may be in "paused" or "discontinued" status!
→ do a google search using the ID, e.g. "MA5342", or use TUM Courses Catalogue, or visit webpages of TUM institutes, most have a dedicated "teaching" – section.

FR, 30.3.2023