Elective Modules completed by MSNE-Students (as of Dec. 2018)

This list is intended to support MSNE students starting to explore opportunities in MSNE program.
This list is not intended to limit or to bind students to a fixed set of elective modules. Students may discuss any module offered at TUM, LMU or elsewhere with individual mentor in order to generate individual learning agreements.

Only modules listed in students' individual and mentor-approved learning agreement may become part of MSNE (electives section) or Research Excellence Certificate!

Electrical and Computer Engineering (TUM)

[EI60014]	Fundamentals of Computer Science for Neuroengineering *	5
[EI60015]	Fundamentals of Electronics for Neuroengineering *	5
[EI60019]	Neuronal Deep Learning for Autonomous Systems	5
[EI60021]	Neuroprosthetics	6
[EI60022]	Fundamentals of Mathematics for Neuroengineering *	5
[EI7006]	Statistical Signal Processing	6
[EI71016]	Intelligent Methods in Control	5
[EI71019]	Visual Perception Engineering	5
[EI7208]	Practical Course Cognitive Systems	6
[EI7210]	Humanoid Robotic Systems	6
[EI7223]	Information Retrieval in High Dimensional Data	6
[EI7263]	Biologically-Inspired Learning for Humanoid Robots	6
[EI7269]	Neural Engineering: Implants, Interfaces and Algorithms	5
[EI7270]	Electric and Magnetic Fields in Biomedical Sciences and in Medical Applicat	5
[EI73141]	Brain, Mind and Cognition (Seminar)	5
[EI7355]	Nanosystems	5
[EI7358]	Pattern Recognition	5
[EI73961]	Psychoacoustics and Audiological Applications	6
[EI7409]	Adaptive and Predictive Control	5
[EI7419],[EI74191]	Machine Learning in Robotics	5
[EI74221]	Signal Processing and Machine Learning	5
[EI74311]	Information Theory	5
[EI7446]	Practical Course Biosignal Processing and Modeling	6
[EI7473]	BioMEMS and Microfluidics	5
[EI7474]	Biosensors and Bioelectronics	6
[EI7493]	Signal Processing for Audio Technology	8
[EI7608]	Microelectronic therapeutic Implants	5
[EI7646]	Computational Neuroscience: A Lecture Series from Models to Application	3
[EI7649]	Approximate Dynamic Programming and Reinforcement Learning	6
[EI7768]	Advanced Seminar Cognitive Systems	5
[EI78013]	Reinforcement Learning for Robotics	6
[EI78023]	Electrode - Electrolyte Interfaces	6
[EI78024]	Reinforcement Learning for Robotics	6

Informatics (TUM)

[IN1503]	Advanced Programming	5
[IN2003]	Efficient Algorithms and Data Structures	8
[IN2062]	Techniques in Artificial Intelligence	5
[IN2138]	Robot Motion Planning	5
[IN2222]	Cognitive Systems	5
[IN2246]	Computer Vision I: Variational Methods	8
[IN2346]	Introduction to Deep Learning	6
[IN2357]	Machine Learning for Computer Vision	5
[IN3200]	Selected Topics in Computer Graphics and Vision	5
[IN9038]	Medical Technology Entrepreneurship	4

Mathematics (TUM)

[MA2504]	Fundamentals of Convex Optimization	9
[MA3081]	Dynamical Systems	9
[MA3305]	Numerical Programming 1 (CSE)	8
[MA4503]	Modern Methods in Nonlinear Optimization	5

TUM School of Medicine

[ME562]	Introduction to Biological Imaging	6

Mechanical Engineering (TUM)

[MW2245]	Think. Make. Start.	6
[MW2318]	Applied Tensor Algebra for Engineers	5

TUM School of Governance

[POL60200]	Artificial Intelligence in Theory and Practice	6
[POL70074]	Making Neuro-Technologies for Society	5

TUM School of Education

[ED0140]	Philosophy of Technology	5
[ED0150]	Philosophy of Science (Advanced Topics)	5
[ED0153]	Complex Systems (advanded topics)	5

Sport and Health Sciences (TUM)

[SG800203]	Human Robotics	5
[SG800204]	Computational Mechanisms of Learning	5
[SG860013]	Human robotics	5

TUM School of Management

[WI001187]	Private Equity	6

TUM School of Life Sciences Weihenstephan

[WZ2682]	Sensory and Behavioral Neurogenetics	5
[WZ2938]	Course block: Neuroscience of vision	5

Carl von Linde-Akademie (TUM)

[CLA10602]	Basic Techniques in Modelling Complex Systems	1

Modules offered at LMU (or anywhere else)

[ID]	Module A,B,C ... (External Perfomance) [MODULE TITLE]**	X

*: MSNE Makeup Modules, exclusively for MSNE students (mentor-approval required)

**: Placeholder module for external performanc(es). Final transcript will show all module titles!