

## English taught Master courses at the Department of Mechanical Engineering

Please find all Module descriptions on our website in the [module handbook](#)

Moduleno.	Module Title	Institute	CP	Term	Lang
16-64-5110	Advanced Fluid Mechanics I	FDY	6	WiSe	E
16-03-3114	Advanced Vehicle Propulsion Systems	VKM	4	WiSe	E
16-11-5060	Aerodynamics II	SLA	6	SoSe	E
16-23-5110	Avionics System Safety	FSR	4	SoSe	E
16-11-3214	Basic Phenomena in Multiphase Flows	SLA	4	WiSe	E
16-17-3284	Biofabrication and 3D-Bioprinting	IDD	4	SoSe	E
16-12-3174	Composite Structures	LSM	4	WiSe	E
16-10-3274	Compressible and Irrotational Flow	FST	4	WiSe	E
16-71-4074	Decarbonization of Industrial Processes: Fundamentals, Process Heat, and Sector-Specific Strategies	STFS	4	SoSe	E
16-05-3164	Dimensioning and Optimization of Vehicle Transmissions	PMD	6	SoSe	E
16-11-3224	Dynamics of Interfacial Flows	SLA	4	SoSe	E
16-23-5040	Flight Mechanics II: Dynamics	FSR	6	SoSe	E
16-04-4134	Flight Propulsion	GLR	8	SoSe	E
16-23-5050	Fundamentals of Navigation I	FSR	4	SoSe	E
16-23-5060	Fundamentals of Navigation II	FSR	4	WiSe	E
16-23-3134	Fundamentals of Space Systems	FSR	4	WiSe	E
16-23-3184	Future Air Transportation Systems	FSR	4	WiSe	E
16-23-3204	Global Satellite Navigation Systems and Orbit Determination	FSR	4	SoSe	E
16-08-5120	High Temperature Materials Behaviour	IfW	6	WiSe	E
16-08-3284	High Temperature Materials Behaviour II	IfW	4	SoSe	E
16-64-3264	High-Accuracy Methods for Computational Fluid Dynamics	FDY	6	SoSe	E
16-17-3274	Inkjet Printing for Digital Fabrication	IDD	4	SoSe	E
16-73-5030	Introduction to the Finite Element Method	CPS	6	WiSe	EG
16-64-5130	Introduction to Turbulence	FDY	6	SoSe	E
16-13-5110	Laser Measurement Technology	RSM	4	WiSe	E
16-09-5170	Lean Production	PTW	6	WiSe	E
16-12-5040	Lightweight Engineering I	LSM	4	SoSe	E
16-12-5050	Lightweight Engineering II	LSM	4	SoSe	E
16-98-4174	Machine Learning Applications	FSR	6	WiSe	E
16-09-3234	Machining Technology - Basics and Application	PTW	4	WiSe	E
16-05-4204	Management of Engineering Design	PMD	4	WiSe	E
16-26-3214	Manufacturing and Load optimized Cast Components	SAM	4	SoSe	E
16-24-5020	Mechatronic Systems I	IMS	4	WiSe	E
16-24-5030	Mechatronic Systems II	IMS	4	SoSe	E
16-12-4224	Micromechanics of Composite Materials	LSM	4	SoSe	E
16-71-3024	Modeling of Turbulent Flows	STFS	8	SoSe	E
16-19-3134	Multiscale Methods in Solid Mechanics	CPS	4	WiSe	E
16-73-4144	Physics-Aware Machine Learning	CPS	6	SoSe	E
16-17-5110	Printed Electronics	IDD	4	SoSe	E
16-17-5210	Printing Technology for Electronics	IDD	4	SoSe	E
16-24-3124	Robotics in Industry: Fundamentals and Applications	IMS	4	WiSe	E
16-04-4154	Selected Topics of Space Propulsion	GLR	4	WiSe	E
16-98-4084	Smart Products, Engineering & Services	PMD/IMS	6	SoSe	E
16-23-3164	Space Debris – Risks, Surveillance and Mitigation	FSR	4	SoSe	E



16-23-5130	Space Flight Mechanics	AD	6	WiSe	E
16-04-3114	Space Propulsion and Space Transportation Systems	GLR	4	SoSe	E
16-23-3194	Space Systems and Operations	FSR	4	SoSe	E
16-98-4074	Sustainable Systems Design	FST	6	WiSe	E
16-23-3144	Systemic Evaluation of Air Traffic	FSR	4	SoSe	E
16-12-3144	Theory of Elastic Stability	LSM	4	WiSe	E
16-98-4054	Transport Phenomena	NMF	6	SoSe	E
16-27-5030	Trends in Automotive Engineering (a unite!-Lecture)	FZD	4	SoSe	E
16-26-4224	Uncertainty Quantification: Methods, Applications, Challenges	SAM	4	WiSe	E
16-19-5100	Weiterführende Methoden der Strömungssimulation	FNB	4	SoSe	G/E
16-21-5120	Work Organization in Intercultural Context	IAD	2	WiSe/ SoSe	E

