

## G30 自動車工学プログラム／Automotive Engineering Program

## 卒業研究配属および卒研テーマ／List of Laboratories available at the 4th year with the research project samples

学科名：機械・航空宇宙工学科／Department of Mechanical and Aerospace Engineering

研究グループ名(英語)／Group	卒研テーマ(英語)／Research project	研究室URL／Laboratory URL	指導教員／Supervisor	連絡先／Contact person	Mail address
Material Characterization & Mechanics	Effect of high-density electric current on the material strength of TiAl alloy	<a href="http://www.mech.nagoya-u.ac.jp/ju/index_E.html">http://www.mech.nagoya-u.ac.jp/ju/index_E.html</a>	Yang Ju	Yang Ju	ju@mech.nagoya-u.ac.jp
Manufacturing Engineering	High-Precision/High-Efficiency Machining and Machine Tool	<a href="http://www.mech.nagoya-u.ac.jp/upr/English/index.html">http://www.mech.nagoya-u.ac.jp/upr/English/index.html</a>	Eiji Shamoto	Eiji Shamoto	shamoto@mech.nagoya-u.ac.jp
Manufacturing Process	Ultra low friction and high wear resistance coatings for advanced automobiles	<a href="http://ume.mech.nagoya-u.ac.jp/">http://ume.mech.nagoya-u.ac.jp/</a>	Noritsugu Umehara	Noritsugu Umehara	ume@mech.nagoya-u.ac.jp
Energy and Environmental Engineering	Development of efficient biomass gasification technology in packed bed gasifier	<a href="http://www.mech.nagoya-u.ac.jp/naruse/">http://www.mech.nagoya-u.ac.jp/naruse/</a>	Ichiro Naruse Ryo Yoshiie Yasuaki Ueki	Ichiro Naruse Ryo Yoshiie Yasuaki Ueki	naruse@imass.nagoya-u.ac.jp ryo.yoshiie@mae.nagoya-u.ac.jp ueki@imass.nagoya-u.ac.jp
Statistical Fluid Engineering	On the intelligent active control of mixing and diffusion process in an axisymmetric air jet flow	<a href="http://www.mech.nagoya-u.ac.jp/sfe/">http://www.mech.nagoya-u.ac.jp/sfe/</a>	Yasumasa Ito	Yasumasa Ito	yito@nagoya-u.jp
Thermal Control Engineering	Advanced thermal management technology for next-generation automobiles	<a href="http://www.eess.mech.nagoya-u.ac.jp/index.html">http://www.eess.mech.nagoya-u.ac.jp/index.html</a>	Hosei Nagano Kazuhiro Yamamoto	Hosei Nagano Kazuhiro Yamamoto	nagano@mech.nagoya-u.ac.jp kazuhiro@mech.nagoya-u.ac.jp
Biomechanics	Study on the Response of Cells and Tissues to Mechanical Environment	<a href="http://bio.mech.nagoya-u.ac.jp/">http://bio.mech.nagoya-u.ac.jp/</a>	Takeo Matsumoto	Takeo Matsumoto	takeo@mech.nagoya-u.ac.jp
Safety Intelligence	Investigation into Cognitive Characteristics in The Use of Personalcare Robots	<a href="http://www.mech.nagoya-u.ac.jp/asi/en/research/">http://www.mech.nagoya-u.ac.jp/asi/en/research/</a>			
Vehicle Safety Engineering	Optimization of crash pulse for reduction of injury risk to vehicle occupants	<a href="http://www.mech.nagoya-u.ac.jp/en/laboratories/human.html">http://www.mech.nagoya-u.ac.jp/en/laboratories/human.html</a>	Koji Mizuno	Koji Mizuno	kmizuno@mech.nagoya-u.ac.jp
Intelligent Robotics	Robot Technologies for Human Assistance	<a href="http://www.mein.nagoya-u.ac.jp/index.html">http://www.mein.nagoya-u.ac.jp/index.html</a>	Yasuhisa Hasegawa	Yasuhisa Hasegawa	hasegawa@mein.nagoya-u.ac.jp
Biorobotics and Biomedical Engineering	MEMS Sensor for Detection of Biological Signals of Driver	<a href="http://www.biorobotics.mech.nagoya-u.ac.jp/index_e.html">http://www.biorobotics.mech.nagoya-u.ac.jp/index_e.html</a>	Hisataka Maruyama	Hisataka Maruyama	hisataka.maruyama@mae.nagoya-u.ac.jp
MEMS and Micromachining	Micromachining of thin film metallic glasses and those application for MEMS sensors	<a href="http://mnp.mech.nagoya-u.ac.jp/">http://mnp.mech.nagoya-u.ac.jp/</a>	Seiichi Hata	Seiichi Hata	hata@mech.nagoya-u.ac.jp
Micro Thermal-Fluids Engineering	Analysis on molecular behavior in high Knudsen number flows	<a href="http://www.mech.nagoya-u.ac.jp/mtfe/index_e.htm">http://www.mech.nagoya-u.ac.jp/mtfe/index_e.htm</a>	Hiroki Yamaguchi	Hiroki Yamaguchi	hiroki@nagoya-u.jp
Computational Mechanics	Shape Optimization Analyses of Vehicle Interior Sound Fields	<a href="http://www.matsumoto.nuem.nagoya-u.ac.jp/">http://www.matsumoto.nuem.nagoya-u.ac.jp/</a>	Toshiro Matsumoto	Toshiro Matsumoto	t.matsumoto@nuem.nagoya-u.ac.jp
Mechanical System Dynamics	Modeling and Parameter Estimation of Inlet and Outlet Boundary of Fluid-Structure Coupled Turbo Machinery Using Machine learning approach	<a href="http://www.nuem.nagoya-u.ac.jp/inouelab/">http://www.nuem.nagoya-u.ac.jp/inouelab/</a>	Tsuyoshi Inoue	Tsuyoshi Inoue	inoue@nuem.nagoya-u.ac.jp
Sensing Engineering	Micro/nano Measurement for Clarifying Boundary Lubrication Phenomena	<a href="http://ayame.fukuzawa.nuem.nagoya-u.ac.jp/index_e.html">http://ayame.fukuzawa.nuem.nagoya-u.ac.jp/index_e.html</a>	Kenji Fukuzawa	Kenji Fukuzawa	fukuzawa@nuem.nagoya-u.ac.jp
Dynamical Systems Control	Mathematical Theory for Control Systems	<a href="http://www.ctrl.mae.nagoya-u.ac.jp/">http://www.ctrl.mae.nagoya-u.ac.jp/</a>	Shun-ichi Azuma Toru Asai	Shun-ichi Azuma Toru Asai	shunichi.azuma@mae.nagoya-u.ac.jp asai@nuem.nagoya-u.ac.jp
Biomechanical Control	Multimode multi-user equilibrium assignment for efficient and low emission traffic flow	<a href="http://www.uno.nuem.nagoya-u.ac.jp/index_en.html">http://www.uno.nuem.nagoya-u.ac.jp/index_en.html</a>	Kouichi Taji	Kouichi Taji	taji@nuem.nagoya-u.ac.jp
Mobility System	Personalized assistance system design for future vehicle Synthesis and control of automated vehicle	<a href="http://www.suzlab.nuem.nagoya-u.ac.jp/index_e.html">http://www.suzlab.nuem.nagoya-u.ac.jp/index_e.html</a>	Tatsuya Suzuki	Tatsuya Suzuki	t_suzuki@nuem.nagoya-u.ac.jp
Structural Mechanics	Characterization and Optimum Design of Advanced Composite Materials	<a href="http://str.nuae.nagoya-u.ac.jp/index.html">http://str.nuae.nagoya-u.ac.jp/index.html</a>	Masahiro Arai	Masahiro Arai	arai@nuae.nagoya-u.ac.jp
Shock Wave and Space Propulsion Laboratory	Boundary layer interaction in high-speed flows	<a href="http://akagi.nuae.nagoya-u.ac.jp/">http://akagi.nuae.nagoya-u.ac.jp/</a>	Akihiro Sasoh	Akihiro Sasoh	akihiro.sasoh@mae.nagoya-u.ac.jp
Solid Mechanics	Stress and deformation analysis of soft materials	<a href="http://www.mech.nagoya-u.ac.jp/mml/">http://www.mech.nagoya-u.ac.jp/mml/</a>	Dai Okumura	Dai Okumura	dai.okumura@mae.nagoya-u.ac.jp
Aerospace Vehicle Dynamics	Multicopter system Attitude and orbit control for small satellites	<a href="http://nanosat.nuae.nagoya-u.ac.jp/index_en.html">http://nanosat.nuae.nagoya-u.ac.jp/index_en.html</a>	Shigeru Sunada Takaya Inamori	Shigeru Sunada Takaya Inamori	shigeru.sunada@mae.nagoya-u.ac.jp inamori@nuae.nagoya-u.ac.jp
Advanced Composites Materials	A study on mechanical and thermal properties of advanced composite materials and their applications	<a href="http://advcomps.nuae.nagoya-u.ac.jp/">http://advcomps.nuae.nagoya-u.ac.jp/</a>	Atsuhiko Yamanaka	Atsuhiko Yamanaka	yamanaka@ncc.engg.nagoya-u.ac.jp
Control Systems Engineering	Advanced control problems related to aircraft and spacecraft	<a href="http://jupiter.nuae.nagoya-u.ac.jp">http://jupiter.nuae.nagoya-u.ac.jp</a>	Susumu Hara	Susumu Hara	haras@nuae.nagoya-u.ac.jp
Propulsion and Energy Systems Engineering	Detonation and Its Application to Aerospace Propulsion System	<a href="http://www.prop.nuae.nagoya-u.ac.jp/">http://www.prop.nuae.nagoya-u.ac.jp/</a>	Jiro Kasahara	Jiro Kasahara	kasahara@nuae.nagoya-u.ac.jp
Fluid Dynamics	Numerical simulation and experiments on turbulent flows	<a href="https://www.fdl.mae.nagoya-u.ac.jp/">https://www.fdl.mae.nagoya-u.ac.jp/</a>	Koji Nagata	Koji Nagata	nagata@nagoya-u.jp