Division of Mechanical Science and Engineering	Research field	Aerospace Engineering	Lab. ID MS14
Laboratory web site	http://aero.w3.kanazawa-u.ac.jp/cgi-bin/wiki.cgi		

Research subjects

Research subjects are system and control in the aerospace engineering fields.
1. Mars airplane
Flight controller design, flight simulations and development of the avionics system of Mars airplane.
2. Unmanned aerial vehicle
Development of airframe, INS and avionics system of small UAV.
3. Vehicle control
Dynamics control by aerodynamic forces using advanced devices.

Master/Doctor course: Education policy, curriculum, typical activity in the laboratory

Firstly, students take basic practices of system control and flight dynamics. After that, research subject is determined
A seminar is carried out once a week.
It is recommended to participate in an international conference and submit a paper to journal.

Daily life in the laboratory, etc.

Personal working desk with a personal computer is available for every student.
Wind tunnel, machine tools, measuring instruments and testbed UAVs are available.
The student has an opportunity to collaborate with other university, lab, and company.

Message or comments by the laboratory faculty staffs

Student with the strong motivation is desired.

Recent Master theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)
2017.3	Localization Method of Mars Airplane using Spectroscopic Information
2017.3	Gust Alleviation Control of Aircraft with Real-Time Flight Characteristic Estimation
2017.3	Estimation of Operator Condition from Identified Operator Model Using Gaze Point Movement
2016.3	Measurement of wind flow around buildings
2016.3	Improvement of vehicle aerodynamics under crosswind using flow actuator
2016.3	Application of an Attitude Estimation System with Thermopile Sensors to the Mars Airplane
2016.3	Development of 10mW class Small Turbulent Sensor Using Ultrasonic
2015.3	Morphing Device with Weaved Strips Structure and Application to Vehicle Control
2015.3	Climate Observation of Mars and Feasibility Studies of Mars Airplane
2014.3	Control-oriented Modeling of Flow Field with Separations
2014.3	Development of the Attitude Sensing System using Thermopile Sensors
2014.3	Gust Response Alleviation via Vortex Control
2014.3	Operation Aid System of Small Unmanned Helicopters
2014.3	Fault Detection Method of Airplane Surface using Flow Sensors
2013.3	Real-time Estimation Method of Flow Condition around Delta Wing Airplane
2013.3	Disturbance Estimation using Pressure Sensors
2013.3	Flight Experiments of Testbed-Rocketplane and Fault Detection Method

Recent Doctoral theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)

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