



Department of Astronautics and Aeronautics College of Engineering



CHUBU UNIVERSITY



The Chubu Region has been designated by the Japanese Government as an International Strategic Special Zone and many aerospace companies are located in and around Aichi Prefecture. We will educate students who will be able to demonstrate their abilities as global leaders in the field of aerospace manufacturing and development.



Features of the Department

Point **1** Supporting each and every one by lecturing with small number of people.

Point **3** Special lecture inviting engineers and managers of the front line.

Point **5** Learning of the composite knowledge on electronic information and mechanical.

Point **2** Learning the manufacturing from the experience at the company sites.

Point **4** Mastering the operation of CATIA and MATLAB.
Students can use 97 CATIA licenses.
(Largest number of licenses in the universities at Chubu region)

Point **6** Overseas training in the US aviation industry gathering area.

Faculty members

NAKAMURA Yoshiaki, Prof. Aeronautical Eng., Fluid dynamics, CFD
 Research : Aerodynamics, Aerodynamic heating, Numerical simulation and experiments
 Career : Prof. of Nagoya University, Director of Japan Students Aviation League, Councilor of Chubu Aeronautical Industrial Technology Center, Fellow of Japan Society for Aeronautical and Space Sciences, Fellow of Japan Society of Fluid Mechanics

MUTOH Takashi, Prof. Plasma physics, Electromagnetics, High-frequency eng.
 Research : Production, heating and acceleration of plasma. Space propulsion with plasma. High-power and high-frequency electromagnetic power system. Heating of plasma by electromagnetic waves.
 Career : Associate Prof. of Kyoto Univ., Prof. of National Institute for Fusion Science

ISHIDA Muneaki, Prof. Electronic device, Power electronics
 Research : Control of vibration by electronic device torque. Electric power transmitter of airplane engines.
 Career : Assistance Prof. of Nagoya University, Prof. of Mie Univ.

HONDA Kiyoshi, Prof. Remote sensing, IT agriculture
 Research : Agriculture work planning by combination of information from satellites and UAV with agricultural simulation.
 Career : Nippon Koei Co., Ltd., Adjunct Associate Professor of Mie Univ., Distinguished Adjunct Prof. of Asian Institute of Technology

KANDA Takeshi, Prof. Aerospace propulsion, Thermodynamics, Fluid dynamics
 Research : Jet propulsion, Propulsion system of rocket and air plane. Hypersonic aerodynamics.
 Career : Japan Aerospace Exploration Agency

TANAHASHI Yoshiharu, Prof. Flight dynamics, Fluid dynamics, Aerodynamic heating
 Research : Aerodynamics of high speed vehicles, Visualization of high speed airflow.
 Career : Mitsubishi Heavy Industries, Ltd.

IKEDA Tadashige, Prof. Aerospace structures, Smart materials & structure systems
 Research : Analysis of smart materials and structure systems. Creation of multi-functional composites. Application of smart structure systems to aerospace structures.
 Career : Technical official of Agency of Industrial Science and Technology, Associate Prof. of Nagoya Univ., Fellow of Japan Society for Aeronautical and Space Sciences.

HOGURO Masahiro, Prof. Measurement from image info, Speech & image processing
 Research : Image recognition & understanding using artificial neural networks and/or speech recognition technologies, Biometric verification(Fingerprint, FingerVein, Face), Medical information sharing system
 Career : NEC Corp., DDS Inc.

EBINUMA Takuji, Associate Prof. Space technology, Satellite positioning, Navigation
 Research : Trajectory prediction of rockets and satellites with satellite navigation system, Navigation system for small satellites, Remote sensing with satellite information, Security of satellite positioning waves
 Career : Univ. of Texas at Austin, Univ. of Surrey, Mitsubishi Electric Co., Tokyo Univ.

HATTORI Koosuke, Senior Assistant Prof. 3D measurement, Sound & image recognition, Statistical proc.
 Research : Sensing system with sound and images, 3D measurement, visualization of statistical data.
 Career : Postdoctoral Fellow in the Robotics Institute at Carnegie Mellon Univ.

KANDA Masae, Senior Assistant Prof. Aerospace material, Composite material
 Research : Development of light-weight cryogenic container for space and aviation, Electroactive polymer, Mechanical property of composite material
 Career : National Institute of Applied Science in Lyon (INSA Lyon), FRANCE (Ph.D.)/ Research fellow of the Japan Society for Promotion of Science (JSPS), Postdoctoral Fellow (PD)/ Center of Applied Superconductivity and Sustainable Energy Research

Curriculum

Category	Freshman	Sophomore	Junior	Senior
Science	<ul style="list-style-type: none"> Basic Mecahnics Practice in Basic Mechanics 	<ul style="list-style-type: none"> Vibrations and Waves Electromagnetics Practice in Electromagnetics 		
Aerodynamics, Power Propulsion		<ul style="list-style-type: none"> Fluid Dynamics Practice in Fluid Dynamics <ul style="list-style-type: none"> Aerodynamics Thermodynamics Practice in Thermodynamics Aerospace Plasma Science 	<ul style="list-style-type: none"> Heat-Transfer Engineering <ul style="list-style-type: none"> Jet Engine 	
Materials and Structures	<ul style="list-style-type: none"> Mechanics of Materials Practice in Mechanics of Materials 	<ul style="list-style-type: none"> Structural Mechanics Practice in Structural Mechanics 	<ul style="list-style-type: none"> Aerospace Materials <ul style="list-style-type: none"> Production Engineering 	
Gundance Control and Dynamics		<ul style="list-style-type: none"> Control Engineering Practice in Control Engineering Electric and Electronic Circuits Practice in Electric and Electronic Circuits 	<ul style="list-style-type: none"> Flight Dynamics MATLAB Mechatronics Electric and Electronic Devices for Aerospace Software Development <ul style="list-style-type: none"> Aerospace Utilization Applied Astronautical Information Engineering 	
Design	<ul style="list-style-type: none"> Engineering Drawings 	<ul style="list-style-type: none"> CAD/CATIA <ul style="list-style-type: none"> Rocket Engineering Aerospace Equipment 	<ul style="list-style-type: none"> Design Practice on Aerospace Satellite Systems Helicopter Engineering 	
Other Aerospace Topics	<ul style="list-style-type: none"> Introduction to Aerospace Manufacturing Practice A Manufacturing Practice B 	<ul style="list-style-type: none"> Aerospace Laboratory Work A <ul style="list-style-type: none"> Aerospace Laboratory Work B Factory Visits Internship A Aerospace English A 	<ul style="list-style-type: none"> Special Lectures on Aerospace A Internship B <ul style="list-style-type: none"> Special Lectures on Aerospace B Management Engineering Aerospace English B Aerospace English C 	<ul style="list-style-type: none"> Advanced Aerospace

