

Division of Frontier Engineering	Research field	Robotics Design	Lab. ID FE01
Laboratory web site	http://da.ms.t.kanazawa-u.ac.jp/rdlab/		
Research subjects			
Based on basic mechanical engineering of mechanics, material mechanics and mechanical design theory, we have developed advanced study fields of “robotics” and “medical or rehabilitation robotics”. Robotics: developing robots that assist and measure human movements, robot hands that can perform advanced gripping and operation, etc. Machine intelligence: developing intelligent tires that can detect driving information of cars, functional protectors that effectively protect human body in sports, etc. Medical engineering: motion and mechanical analyses of human joints, and developing surgical simulations.			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
All master course students belong each study group. For cooperating with staff, the students are required that they take it upon themselves to resolve each task. To conduct studies, the students learn kinematics and dynamics, design with 3D CAD, design sensor system, construct controlling programs, and product mechanical parts. Students will learn practically in academic fields such as kinematics, dynamics, and mechanics of materials, and acquire skills in mechanical design, electronic circuit design, programming, and experimental design. For improvement of logical thinking and engineered writing skills, the students write debrief reports of study and debrief every week. In addition, to improve presentation and communication skills, a seminar presented own study is conducted biannually.			
Daily life in the laboratory, etc.			
All students must lead a well-regulated life, proceeding research activities according to own plan. On the other hand, we have a lot of recreation such as spring welcome party, year-end party or summer camp to deepen the friendship between students and staff. In addition, next to the student room, there is a refresh room for students, students can take a meal and break.			
Message or comments by the laboratory faculty staffs			
Please work aggressively to conduct cutting edge robotic studies. Through the studies, we aim for developing your own self and establishing a basement as engineer and a member of society. Because the students learn basic mechanical engineering of mechanics, material mechanics and mechanical design theory, these knowledge and skills help them in future. Because almost students work at company after graduating master course, the students judge own adequacy through studies and exchanges.			
Laboratory mail address	Hiroshi Tachiya <tachiya *at* kanazawa-u.ac.jp> Masahiro Higuchi <higuchi-m *at* kanazawa-u.ac.jp> Yosuke Suzuki <suzuki *at* kanazawa-u.ac.jp> Hiroaki Kozuka <kozuka *at* kanazawa-u.ac.jp>		