Division of Environmental Design	Research field	Structural Design Engineering	Lab. ID ED01
Laboratory web site	https://struct-eng.w3.kanazawa-u.ac.jp/index.html		

Research subjects

The research concerns about the civil infrastructures' general mechanical performance which includes the load-carrying capacity, the fatigue damage mechanism and the serviceability, etc. through the experimental and numerical ways. A variety of the field or laboratory tests including not only the static ones but also the dynamic ones such as the impact tests and the fatigue tests are being carried out. Moreover, the numerical simulations and analysis are also in process by using general commercial software and self-developed programs for verifying the test results and analyzing the performance observed in tests.

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

<Master course>
At the beginning of the first academic year, every fresh master course student will have a face to face discussion with the supervisor on the research plan and the future career in April. Then the research activity can be started under the supervisor's academic direction. Meanwhile, a number of courses will be provided. At the end of the first academic year, there will be an intermediate examination on the research progress. After that, the research should be continued and the graduation thesis preparation should be finished before the end of the last January. In addition, for those students who have plans to find jobs in Japan after graduation, the job hunting activities probably should be arranged in the first half of the second academic year.
＜Doctoral course＞
The doctoral course student should have more and frequent discussions with the supervisor and the research collaboration group to carry out the research.

Daily life in the laboratory, etc.

The computer and desk are provided for each student. Meanwhile, the lab is with the good research atmosphere assisting the students to focus on the research and study.

Message or comments by the laboratory faculty staffs

Do good job of research, and do not waste your research life.

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

year.month	Thesis title (including English translation of Japanese thesis title)
2021.3	Study on Performance Evaluation of Reinforcing Bars Using Mechanical Fixing
2020.9	Study on corrosion mitigation by galvanic anode system and corrosion monitoring by titanium wire sensor
2020.3	Study on evaluation of the deterioration for road bridge slab using influence line
2020.3	Study on deterioration diagnosis of concrete slab using impact load
2020.3	Study on performance evaluation of rockfall protection fence
2020.3	Study on performance evaluation of shear reinforcement by mechanical rebar fixing
2020.3	Noise removal and anomaly detection of bridge monitoring data by using statistical methods
2020.3	Soundness Evaluation on ASR-Affected PC Bridge using Long-term Monitoring Method
2019.3	A study on deterioration characteristics of precast PC slab damaged by ASR and implementation of fly ash concrete
2018.3	A study on experiments and FEM models for a rockshed composed of half-precast SRC members
2018.3	Study on Mechanical Behavior of Concrete Bridge Slab with Degradation Phenomena

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

year.month	Thesis title (including English translation of Japanese thesis title)
2021.9	Experimental and numerical study on pull-out resistance of flip-type earth anchors under different ground conditions, and its application to slope stability
2020.3	Study on durability and practicability of concrete bridge using carbon fiber reinforced plastic tendon
2019.9	A study on structural performances of reinforced concrete slab bridge and rigid-frame bridge with H-shaped steel girders
2019.9	Study on simplified estimation method on bending deformation of beam with sand cushion
2019.9	FUNDAMENTAL STUDY ON PERFORMANCE EVALUATION OF PROTECTION STRUCTURE FOR IMPACT BY ROCKFALL
2019.3	STUDY ON EVALUATION METHOD FOR DETERIORATED BRIDGE SLABS BY SELF-PROPELLED IMPACT VIBRATION EQUIPMENT

2019.3	A study on evaluation of load carrying capacity and maintenance of early deteriorated road bridge deck in Hokuriku district
2018.3	A Study on the Dispute Risks ReductionConcerning Delay Analysis
2018.3	Structural health assessment for ASR-deteriorated PC girders using static and dynamic examinations
2018.3	A study on inspection method based on change of vibration characteristics on existing road bridges deteriorated by salt damage
2018.3	A Study on Experiments and Analysis Methods for Impact Resistance Performance of SRC Rock-sheds
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