

International Center for Urban Safety Engineering (ICUS)

Institute of Industrial Science

<http://icus.iis.u-tokyo.ac.jp>

- Urban Safety & Disaster Mitigation Division
- Environment Informatics Division
- Social Infrastructure Management Division

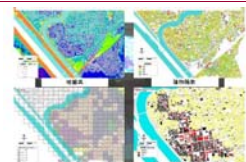
Outline of ICUS

In March 2011 the International Center for Urban Safety Engineering (ICUS) concluded a ten-year period of activity. After passing the third party evaluation and institution internal evaluation, a "new" ICUS began from April 2011 with three new research divisions: "Urban Safety and Disaster Mitigation Division," "Environment Informatics Division," and "Social Infrastructure Management Division." Based upon the past activities, "promotion of advanced research," "construction of networks," and "information collection and dissemination" will be set as the main activities towards developing the safety of cities by university researchers from an international viewpoint.

Promotion of Advanced Research

Urban Safety & Disaster Mitigation Division

- urban safety and disaster mitigation strategy
- development of temporal-spatial disaster process model
- implementation of earthquake safer masonry structures
- development of proper disaster broadcast model by mass-media
- development of IT triage system
- effective use of information of disaster management
- development of support for establishment of regional disaster management plan and its implementation
- development of assessment method of vulnerability and fragility to natural hazard
- restructure of urban disaster mitigation planning theory
- post-disaster recovery and rehabilitation planning



Analysis on urban strategy for flood resistant and resilience



An application based on AR for smart phone, called "Tensai! Manabu-kun"



Detection of liquefaction-related jetted sands on roads



Development of effective retrofitting technology considering economical conditions and of social system for its propagate



Workshops on disaster information dissemination in agricultural and mountainous area in Thailand (right) and Bangladesh (left)

Environment Informatics Division

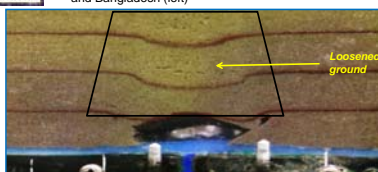
- assessment and adaptation to climate change
- application of remote sensing technology to great disaster
- monitoring and conservation of ecosystem
- disaster information dissemination to diverse communities including foreigners
- poverty reduction through flood risk reduction
- environmental development and transboundary cooperation

Social Infrastructure Management Division

- life cycle and stock management of infrastructure
- technology management
- ground maintenance and sustainability
- ground improvement



Inspection of concrete structures in Myanmar



Evaluation of loosened ground due to internal erosion

ICUS Project

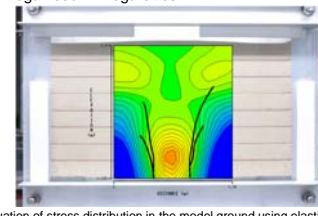
High-dense Wooden Structure City in 2012

This research aims and purposes fresh planning of low-rise and high-dense wooden structure city by applying latest infrastructure technologies and disaster protection technologies.(ICUS & buildinglandscape)



Research Committee 81

The object of RC81 is to work out a kind of improved and secured urban technology package to prepare for the coming mega flood in mega-cities.



Evaluation of stress distribution in the model ground using elastic wave tomography

Construction of networks

Collaborative research Projects

RNUS (Regional Network Office for Urban Safety)

RNUS was established at the School of Civil Engineering, Asian Institute of Technology (Bangkok, Thailand) in 2002.

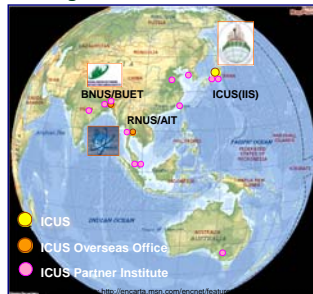
BNUS (Bangladesh Network Office for Urban Safety)

BNUS was established at the Bangladesh University of Engineering and Technology (Dhaka, Bangladesh) in 2006.



The 5th Joint Student Seminar on Civil Infrastructure in Bangkok, Thailand, 8/20-21

Exchange of MOU for Collaboration



- Asian Institute of Technology, Thailand (RNUS)
- Dept. of Civil Engineering, Bangladesh University of Engineering and Technology, Bangladesh (BNUS)
- Bangladesh Earthquake Society, Bangladesh
- National Centre for Earthquake Engineering, Bangladesh
- Indian Institute of Technology Kanpur, India
- Protective Technology Research Centre, School of Civil and Environmental Engineering, Nanyang Technological University, Singapore
- Dept. of Civil Engineering, National University of Singapore, Singapore
- LCM Research Center, The Port and Airport Research Institute, Japan
- Siridorn International Institute of Technology, Thammasat University, Thailand
- Dept. of Civil Engineering, Shibaura Institute of Technology, Japan
- Global U-City Construction & Information Hub, Dept. of Civil Engineering, Han Yang University, Korea
- Dept. of Construction Engineering, National Kaohsiung First University of Science and Technology, Chinese Taipei
- Center for Public Safety Research, Tsinghua University, P.R. China
- School of Applied Sciences and Engineering, Monash University, Australia
- NSET, the National Society for Earthquake Technology, Nepal

International Symposium (USMCA)



Group photo of participants at Chinggis Khan Monument in front of the Government House on 10/10

Information collection and dissemination

ICUS Open Lecture



22nd ICUS Open Lecture on 4/16

Newsletters and Technical Reports

ICUS issues the "ICUS Newsletter," a periodical English publication (4 issues every year), as well as ICUS Reports, which cover various research topics, to over 1300 people in more than 70 countries, including researchers, research organizations and government-related organizations.



ICUS Newsletter and ICUS Report