Global COE Program of MEXT
Sustainability/Survivability Science for Resilient Society
Adaptable to Extreme Weather Conditions

A New Graduate School Educational Program 2009-2013
by
Kyoto University

Disaster Prevention Research Institute (DPRI)
Research Institute for Sustainable Humanosphere (RISH)
Graduate School of Science (GSS)
Graduate School of Global Environmental Studies (GSGES)
Graduate School of Engineering (GSE)
Graduate School of Informatics (GSI)
Graduate School of Agriculture (GSA)

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Confronting Threat from Extreme Weather

Frequency of Extreme weather is increasing with the progress of Global Warming.

Variability of weather conditions is now exceeding societal capability, so that social and engineering adaptation is now required.

Thus, it is an urgent requirement to promote not only researches on this issue but also education of students who will cope with this issue in coming decades.

In this Program, Kyoto University will generate world-class knowledge through freedom and autonomy in research that conforms with high ethical standards.

Kyoto University will also strive for diverse development in pure and applied research in the humanities, sciences and technology, while seeking to integrate these various perspectives.
Inter-disciplinary Education

**BASIC CONCEPT of EDUCATION**

- Producing **leading researchers, international elites and local elites** who have a mission and moral sense to overcome threats that humans are (will be) facing, bring happiness and welfare and contribute to sustainable/survival society.

- Growing **specialists with generalists’ views (generalists with specialists’ views)**, who can consider disasters environmental changes as consequences of interaction between natural and social phenomena through inter-graduate-school educational system.

- Producing such elites with **obligatory field research**, advanced observations, experiments and investigations, practical prediction and impact assessment, who can be policy-making, have **relevant judgment at disaster sites**, and have a wide range of activities.
Coupled Science-Engineering and Liberal Arts Research

**Theme 1:** Science-Engineering Interdisciplinary Research on the Monitoring and Prediction of Extreme Weather, Water Cycle and Disaster Contingency

- a. Observations to monitor, detect and verify meteorological parameters of climatic change
- b. Numerical modeling of meteorological and hydrological processes
- c. Hazard estimation/prediction and disaster reduction/management

**Theme 2:** Integrated Social-Natural Sciences Research Towards the Creation of a Sustainable Society Adaptable to Global Environmental Change

- d. Environmental science for adaptation strategies against extreme weather
- e. Environmental science for adaptation strategies against long-term chronic weather hazards in Africa

Towards adaptation measures in harmony with local situation, climate and culture!