NCS-Based KAIST Job Description – Research position

Recruitment area	Research (Contract Researcher)	Classification system	Parent category	Sub-category	Sub sub-category	Sub sub-sub-category
			23. Environment, Energy, Security	01. Industrial Environment	02. Atmosphere Management	04. Climate Change Adaptation
Mission	○ Korea Advanced Institute of Science and Technology (KAIST) Act - Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development - Carrying out the nation's mid- and long-term R&D, and basic and applied research to foster national competitiveness in science and technology - Providing comprehensive support to research conducted by other research centers and industries					
KAIST's major businesses	○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity ○ Research: Support for development of outstanding research projects, acquisition of specialized researchers, advancement of entrepreneurial culture, creation of high value-added intellectual property rights, promotion of technology transfer/commercialization, and development of large-scale, leading projects ○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership ○ Administration: Provision of administrative and technical service for international students/faculty (Support for operation of a "Korean-English bilingual campus")					
Growth engines	○ Vision: Global Value-Creative World-Leading University - Hub for Fostering Knowledge Creation and Global Convergence Talents - Center for the World-Leading New Knowledge and Technology) ○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies ○ 3C Leadership: Change, Communication, Care					
Duties and responsibilities	- Development of numerical scheme for dam operation and coupling to CaMa-Flood global-scale river model - Hyper resolution (~1km) hydrologic modeling incorporating dam operation over Korean penninsula					

Job performance details	- Development of numerical scheme of reservoir operation - Coupling developed reservoir scheme to CaMa-Flood, a global-scale river model - Validation of developed modeling framework - Global and regional (incl. Korean peninsula) applications and assessment of water management impacts - Climate change impact assessment and detection/attribution of human-induced global warming - Development of scientific papers
Knowledge required	- Ms. in a broad range of geoscience (e.g., atmospheric science, hydrology, ecology), applied mathematics, computational social science and economics
Required skills	- Expertise in statistical analysis and programming in at least one of Python, Jullia, and Fortran - Strong oral and written communication skills in English
Attitude while performing duties	○ Compliance with research ethics ○ Creative approach to a subject and tenacious and in-depth research ○ Attitude to communicate and cooperate with other colleagues and PI in the laboratory
Basic skills	○ Problem-solving ability, communication ability, personal relationship, professional ethics
Reference site	www.ncs.go.kr, www.kaist.ac.kr