

NCS-Based KAIST Job Description – Fixed term (Research position)

Recruitment area	Research position	Classification system	Parent category	Sub-category	Sub sub-category	Sub sub-sub-category
			Engineering	Materials Science and Engineering	Magnetic Materials	- Spintronics - Spin wave - Magnetic memory
Mission	<ul style="list-style-type: none"> ○ Korea Advanced Institute of Science and Technology (KAIST) Act <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> ○ 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	<ul style="list-style-type: none"> ○ Vision: Global Value-Creative World-Leading University <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> ○ Development of magnetic materials and devices for spin devices based on spin wave ○ Characterization of the spintronic devices and associated modeling 					
Job performance details	<ul style="list-style-type: none"> ○ Preparation and characterization of magnetic materials (metal or insulator) ○ Evaluation electrical and magnetic properties of spintronic devices ○ Data analysis/modeling and paper publication 					
Knowledge required	<ul style="list-style-type: none"> ○ Physics of magnetism ○ Fabrication and characterization of spintronic materials and devices 					
Required skills	<ul style="list-style-type: none"> ○ Handling and maintenance for deposition systems ○ Micro/nano-fabrication using lithography and characterization of electro/magnetic properties 					
Attitude while performing duties	<ul style="list-style-type: none"> ○ Analytical thinking and objective views ○ Active collaboration ○ Compliance of research ethics 					
Basic skills	<ul style="list-style-type: none"> ○ Problem solving ability ○ Communication ability 					
Reference site	www.ncs.go.kr, www.kaist.ac.kr					