Our excellent MIREBraiN program will lead us to the Innovative University Changing the world through Convergence

DGIST is an Institute of Science and Technology established by the Korean government under a Special Act for strengthening nation’s science and technology. Since its beginning as a government-funded research institute, DGIST has been growing as a leading university of science and engineering.

Specifically, DGIST can be characterized by three strategic innovations, otherwise known as the "3 Innovation Strategies".

1. Innovative education leading on basic research and future talents in the development of convergence knowledge.
2. Innovation in research transforming the world through Convergence.
3. Create social value through technology innovation.

Our commitment to the development of a " value-creating Society through education and research cooperation" is evident in our commitment to social responsibility, collaborative partnerships, and interdisciplinary research.

The Uniqueness of DGIST: The only university which has RAD division as well as Academic division

Convergence Research Institute

Innovate education
Innovate research
Create social value through technology innovation
Synergy of education-research cooperation

Strategic Focus Areas: MIREBraiN

DGIST MIREBraiN stands for the six strategic areas on which DGIST focuses its research and education. Through our strategic focus in convergence areas, DGIST fosters the future leaders of the nation and society who transform their creativity and convergence thinking to new discoveries.

- Emerging Materials Science
- Emerging Information Science
- Information and Communication Engineering
- Polioics Engineering
- Energy Science & Engineering
- Brain & Cognitive Sciences
- New-Biology

Our strategic focus areas build upon the innovative university-changing the world through convergence.

Majors and Programs

- Emerging Material Science
- Information and Communication Engineering
- Robotics Engineering
- Brain & Cognitive Sciences
- New-Biology

Benefits

- Tuition: Full scholarship for all graduate students.
- Salary: M.R. (Teaching assistant fellowships, including overseas allowances, TA stipend, etc.)
- Fellowship: Special Scholarship - 3,000,000 KRW / semester, Research studentship - 3,000,000 KRW / semester, Enroll. Scholarship - 3,000,000 KRW / semester
- Living assist.: R.A./T.A. scholarships
- Research scholarships: Maximum 10,000,000 KRW
- Expenditure: Convergence Research Institute (CRI) members (Research group)
- Infrared Research Institute (IRRI) members (Research group)
- Center for Next Aging Research (CNAR) members (Research group)
- Korean Brain Research Institute (KBRI)
- Research committee (Belle Foundation) members / (Korea Brain Research Institute)
- Discovery: Cooperative Program can be requested by non-qualified students, if you applied for the integration (M.S., Ph.D.) Program.

How to apply

- Download a registration form (application form). Attention: The application form can be obtained only during the time period.
- Email Submission: admission@dgist.ac.kr
- Dormitory Convenient on-campus dormitory facilities with inexpensive housing fees

Innovative University Changing the world through Convergence
Emerging Materials Science

Pursuing the state-of-the-art science on new materials via interdisciplinary research

Overview
- Nano- and bio-materials with the focus on emerging new materials systems
- Understanding and applications of nano- and bio-materials

Research and Education Focus
- Nanoscale Optoelectronic Materials Laboratory
- Biomimetic Materials Laboratory
- Biomedical Imaging and Mobile healthcare
- Satellite communications networks

Arbitrary Faculty Members
- CheolGi Kim
- Chun-Yeol You
- Kimoon Kim
- Joongoo Kang

Information and Communication Engineering

Embracing the next generation through convergence of information and communication

Overview
- Developing tools for technology development
- Information and communication infrastructures

Research and Education Focus
- Cross-layer communication and signal processing
- Intensive on-site education and training

Arbitrary Faculty Members
- Prof. jdlee@dgist.ac.kr
- Prof. lee.shinbuhm@dgist.ac.kr
- Prof. Hoon Sung Chwa
- Prof. Jae Ha Kung

Robotics Engineering

A Mecca of core-technologies in medical robotics - the ascension of Robotics Engineering Major of DGIST

Overview
- Medical robotics
- Emerging fields of technology

Research and Education Focus
- Molecular and Neural Circuitry Basis Underlying Synthetic and Neuroprosthetic Control
- Computational Neuroscience, Biophysics and Big-Data Analysis

Arbitrary Faculty Members
- Prof. Jonghyun Kim
- Prof. Sukho Park
- Prof. Watanabe, Masahiro
- Prof. Aurbach, Doron

Energy Science & Engineering

Research and Development of environmentally friendly renewable energy sources and the devices

Overview
- Renewable and sustainable energy sources
- Advancements in green technology

Research and Education Focus
- Multi-scale molecular modeling of materials for advanced materials
- Cell and Molecular Farming

Arbitrary Faculty Members
- Prof. Min-Young Chun
- Prof. Kyungjin Kim
- Prof. Jin Hae Kim
- Prof. Pyung Ok Lim

Brain & Cognitive Sciences

Leading the world in brain science through convergent education and research

Overview
- Frontier research in brain science
- Neurotechnology

Research and Education Focus
- Neural Circuits and Behaviors
- Computational Neuroscience, Biophysics and Big-Data Analysis

Arbitrary Faculty Members
- Prof. Hyungju Park
- Prof. Erwin Neher
- Prof. Jawook.Koo@kbri.re.kr

New Biology

Creating a next-generation paradigm of knowledge, technology, and science in the arena of the major biology for sustainable humanity

Overview
- New Biology
- Innovative approaches and technologies

Research and Education Focus
- Cell and Molecular Farming
- Agriculture

Arbitrary Faculty Members
- Prof. Dae Sung Chung
- Prof. Jong-Sung Yu
- Prof. Soojin Son
- Prof. Soowon Yoo

Specialized Research Fields
- NanoBiomaterials & SpinTronics Laboratory
- Micro Laser Laboratory
- Biomolecular science Laboratory
- Nanoscale Optoelectronic Materials Laboratory
- Biomimetic Materials Laboratory
- Biomedical Imaging and Mobile healthcare
- Satellite communications networks

Advisory Faculty Members
- Curious Minds’ Molecular Modeling (CMMM) Lab
- Electrochemistry Laboratory for Sustainable Energy (ELSE)
- Light, Salts and Water Research Lab
- Converge Science: Applying Converging Technologies for Health and the Environment (C4E)
- Cell and Molecular Farming
- Agriculture (also known as ‘smart farming’)

Convergence with Emerging Materials
- Robotics Engineering

Convergence with New Biology
- New Biology

Convergence with Information and Communication Engineering
- Information and Communication Engineering

Convergence with Brain & Cognitive Sciences
- Brain & Cognitive Sciences

Convergence with Energy Science & Engineering
- Energy Science & Engineering

Innovation Feature of Department of the New Biology
- Extensive research on the theoretical and applied aspects of nano- and bio-molecular science, and nanotechnology
- Development of advanced materials and devices for sustainable energy and agriculture
- Focus on frontier research in brain science through convergent education and research
- Integration of technology development and academic research

Faculty
- Dr. Soo Hyun Chi
- Dr. Sung Ho Kim
- Dr. Hyun Young Lee
- Dr. Jin Young Kim
- Dr. Byung Chang Suh
- Dr. Min Young Chun
- Dr. Dong-Gook Lee
- Dr. HanBum Kim
- Dr. Jong Hoon Lee
- Dr. Eun Ji Lee
- Dr. Sung Min Kang
- Dr. CheolGi Kim
- Dr. Chun Yeol You
- Dr. Kyungjin Kim
- Dr. Hoon Sung Chwa
- Dr. Jae Ha Kung
- Dr. Jong Hyun Kim
- Dr. Sukho Park
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