



Ministry of Land,
Infrastructure and Transport

Leading new industries of the future with “Land Transport + DNA Convergence”

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- Newly elected three Land, Infrastructure and Transport DNA+ Convergence Technology graduate schools (Ajou University, Incheon National University, and Korea Aerospace University)

□ The foundation for the creation of various new industries has been established by the convergence of **the land transportation industry**, which has been considered as a traditional industry, and **DNA** (DATA, NETWORK, AI), which are core future technologies.

- **The Ministry of Land, Infrastructure and Transport** (Minister Won Hee-Ryong, MOLIT) started the “**Land Transport DNA+ Convergence Technology Graduate School**” project, which combines the land transport industry and DNA technology, for the first time this year to **foster advanced researchers**.

- Ajou University, Incheon University, and Korea Aerospace University were selected as the first universities for the project.

- Each university selected will receive approximately **KRW 6 billion*** for **5 years**. The universities will ① **newly open master's and doctoral degree programs** tailored to each field, and ② conduct convergence research with technology commercialization and field practice through **industry-university cooperation** with **innovative companies** to train manpower.

* Expenses for opening the degree program, operating expenses (curriculum, faculty, laboratory equipment, etc.), and industry-university program are supported

- This year, a contest was held in the three fields: **△road transportation, △logistics, and △aviation**. Three excellent consortiums with **curriculum for the degree program, talent nurturing road map, and industry-university cooperation plan** were selected.

*A total of 7 universities formed an industry-university-research consortium and applied. The competition ratio was recorded to be 2.3:1

- **Ajou University Consortium*** was selected in the **road transportation sector**.
- The '**AI Mobility Engineering Department**' was newly established to provide a **converged curriculum** including mobility infrastructure and future cars. Also, companies related to **artificial intelligence and**

autonomous driving software are planning to participate to ensure that the talents in the master's and doctoral program develop problem-solving ability **to respond to industrial demands.**

*4 institutions including Ajou University, KAIST, Nota (artificial intelligence model development), and EMG (intelligent transportation system platform)

□ In the logistics sector, **Incheon National University's consortium*** was selected. **'DNA + Convergence Logistics System Department'** will be established according.

○ The consortium plans on providing education programs that combine data mining and AI networks to establish **commercialization capabilities**, such as discovering digital platform-based business models, and **problem-solving capabilities** in the field. Also, Various logistics IT-related companies will participate to provide industry-academic-linked programs such as logistics automation.

*6 institutions including Incheon National University, One Zero Soft (Logistics data platform), Bold 9 (Digital Twin), CnTR (Logistics big data), PLZ (Control solution), Floatic (Logistics robot), etc.

□ In the aviation sector, **the Korea Aerospace University consortium*** was selected. The consortium plans to establish the **'DNA + Aviation Convergence Major.'**

○ The **curriculum** will **combine DNA technology** with **operation, maintenance, and control** throughout the entire cycle and include

safe flight using artificial neural networks, and smart maintenance based on data and deep learning. Together with companies in fields such as drones and aviation IT, the consortium plans on nurturing high-quality manpower that can respond to **new industrial demands** through drone service development, platform commercialization, and start-up support.

*3 institutions including Korea Aerospace University, Pablo Air (drone service), and The Peach (drone HW/SW)

□Lee Woo-Je, the director of policy planning at MOLIT, stated, “In a situation where new industries in the field of land transportation are rapidly growing through convergence of autonomous driving, smart city, and drones, nurturing advanced research **manpower tailored to industry-university needs** is an urgent matter. We will select **two more universities** in general sector **next year**, so **please keep an eye out for the announcement.**”