

AI for Education in Korea

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Why AI is important in our society?

The 4th Industrial Revolution is a period when the productivity of work is dramatically improved as the whole process of production, distribution and consumption of goods or services is intelligent through the use of core technology like big data, Iot, robotics, autonomous driving vehicles, virtual reality and 3D printing which are all centered on AI.

Why AI learning in school is important?

- Humanistic perspective: AI is a human heritage. Students need to understand the key skills that guide the rapidly change of the modern period.
- Ordinary life perspective: AI is closely related to our daily lives. Students need to learn AI in order to get on with their daily lives.
- Developmental perspective: AI is like a problem solver. Students can develop their own thinking power by exploring basic knowledge to operate AI.
- Social Developmental Perspective: AI is changing the current society as well as will change our future society. Students have to learn the AI technology to speed up the development of workstation where they will contribute as workers after graduation from school.

How to training AI Teachers?

The South Korean government has decided to train 1,000 AI teachers every year for five years to strengthen AI learning in school. From the second semester of 2020, some universities will train in-service teachers with master's courses. Government will support half of the tuition for in-service teachers during three-year master's course.

Role of KNUE in training AI teachers

KNUE will train about 160 in-service teachers every year. This is one-six of the nation's whole quota of 1000. But No curriculum, Lack of professors and facilities to handle AI training. We will urgently hire two AI professors this semester and secure facilities and space for teachers to practice in weekends. We will get support of professors from the University of Science and Technology, which is one of the top universities in science area and located near KNUE campus.

Tracks in AI teacher training in KNUE

There will be at least four tracks students choose as they like:

- Humanities and Social Study sub-major for elementary and humanity subject teachers.

- Science & Engineering sub-major for normal high school teachers
- Science & engineering sub-major for gifted and vocational high school teachers.
- Art and culture sub-major for music and art teachers

Curriculum for AI Teacher Training Course

The students will take 27 credits for the following eight subjects:

- An Introduction to AI (3 credits)
- AI and Data (3 credits)
- The Realization of AI (3 credits):
- AI for problem solving at the social and academic levels (3 credits)
- Mathematics for AI (3 credits).
- Projects for Master Thesis (3 credit)
- Independent Study to relate AI and subject matters (6 credits)