Sungkyunkwan University (SKKU) International Summer Semester (ISS) 2026

Economics of Artificial Intelligence

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SHORT COURSE DESCRIPTION

Artificial Intelligence has the chance of being a transformative technology. Bloomberg has suggested that generative AI is anticipated to become a US $1.3 trillion market by 2032. More than 90% of top organisations in United States have invested in Artificial Intelligence activities. In 2024 South Korea President announced South Korea will invest close to $ 7 billion by 2027. Now most top organisations and multinational businesses are using Artificial Intelligence for improved performance and cost savings. With advancements in machine learning, automation, and natural language processing, AI, particularly generative AI, is revolutionizing traditional business, organisations and the economy as a whole. While there will be a new wave of innovation and evolution there also may be associated issues like nature of jobs, inequality or fairness in society.

In this course you will gain a high-level overview of technologies, including capabilities and limitations, while understanding generative AI, its methods, and its business applications.

READING MATERIALS

For the course we will follow the book Economics of Transformative AI (Ajay K. Agrawal, Anton Korinek, and Erik Brynjolfsson. 2025. University of Chicago Press).
[The book is available free from NBER.org in pdf format.]

COURSE REQUIREMENTS AND GRADING

Students are encouraged to engage and participate in the classes. They will be required to think of practical issues which AI can solve or problems AI can create. All ISS classes are pass/fail based on the student academic achievement evaluated by grades on a scale of 100 points (grade of 60 or above is Pass). SKKU regulations require students to attend at least 80% of all classes. For final grade of the students will have to submit an individual term paper and do a group presentation. The term paper will be 60 % and the group presentation will be 40% of the final grade.

COURSE SCHEDULE

– WEEK I –

Monday (29 June)

1. The use of AI to improve decision-making

Tuesday (30 June)

2. The use of machine learning in economics

Wednesday (1 July)

3. The adoption and diffusion of AI

Thursday (2 July)

4. AI's impact on the labour market (including via automation)

– WEEK II –

Monday (6 July)

5. The impact of AI on business practices and government policy -1

Tuesday (7 July)

6. The impact of AI on business practices and government policy - 2

Wednesday (8 July)

7. Macroeconomic impact of AI

Thursday (9 July)

8. Firms, finance and AI.

– WEEK III –

Monday (13 July)

9. Regulation of AI

Tuesday (14 July)

10. Privacy and security of AI

Wednesday (15 July)

11. AI and education

Thursday (16 July)

12. AI and inequality

– WEEK IV–

Monday (20 July)

13. AI and discrimination

Tuesday (21 July)

14. Impact of AI on government and governance.

Wednesday (22 July)

15. Is AI an existential threat?