

Department of Software Convergence at Kyung Hee University

Hyunggu Jung, Ph.D.

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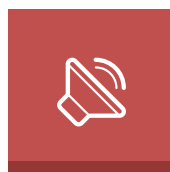
A Bit of History

- 1983** Established number of 39 undergraduate students
- 1997** Into the department of 1 engineering, Electronic Engineering calculations for department formation
- 1999** Changing Electronics and Information
- 2001** Changing College of Electronics and Information, Computer Science and Engineering
- 2010** Formal establishment of Department of Computer Engineering from a former Computer Science and Engineering major
- 2017** Formal establishment of Department of Software Convergence
- 2018** College of Software with two affiliated departments is launched
 - 60 students in Software Convergence
 - 90 students in Computer Engineering

Department Overview

2017

Formal establishment of Department of Software Convergence, First underage students enrolled



Future Automobile & Robot, Data Science, Game Contents, & Convergence Leader tracks

60 students enrolled
(1 international student)

2018

The “Art & Technology” major is converged with the Game Contents track, one of the program tracks of the Department of Software Convergence

- ❖ The class of 2018 is eligible to apply, and lectures will start in 2019 when they become sophomores.



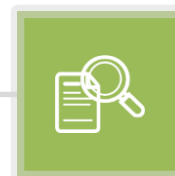
Future Automobile & Robot track

Self-driving car, electric vehicle, smart-factory, autonomous robot
(Participating departments: Mechanical Engineering, Electronic Engineering, Computer Engineering, Industrial Design)



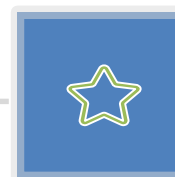
Game Contents track

Virtual reality, augmented reality, artificial intelligence, future network-based games
(Participating departments: Digital Contents, Computer Engineering, Humanitas College)



Data Science track

AI-based intelligent new industry
Big Data, cloud computing
(Participating departments: Industrial & Business Engineering, Computer Engineering)



Convergence Leader track

Fostering thoughtful leaders in interdisciplinary field through curriculum led by students

Track Selection

Students choose a track by the end of 1st year

Stats of 2nd-year students as of 2018

Future automobile & robot: 14

Data science: 29

Game contents: 16



Multiple tracks allowed

Students are allowed to pursue multiple tracks as they earn required minimum credits toward those tracks

The next generation of thought leaders

Faculty

**3 core faculty & 18 extended faculty
across 7 Departments from 5 Colleges**

Core Faculty

Prof. Sungwon Lee
(Department Chair)
Prof. Jiyoung Jung
Prof. Hyunggu Jung

College of Software

- Department of Software Convergence
- Department of Computer Engineering

College of Electronics and Information

- Department of Electronics

College of Arts and Design

- Department of Industrial Design

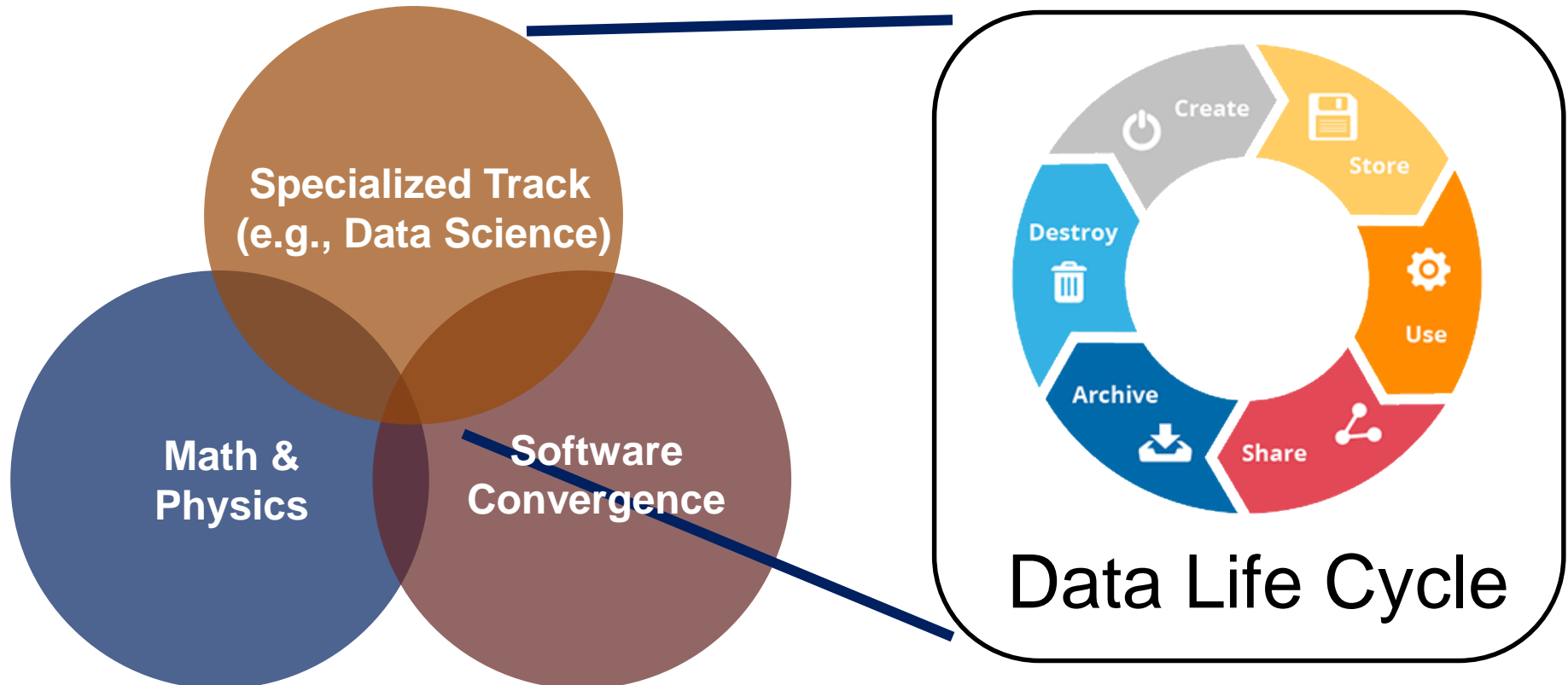
College of Engineering

- Department of Industrial & Business Engineering
- Department of Digital Contents
- Department of Mechanical Engineering

Humanitas College

Educational Goal

To foster the next generation of thought leaders who is able to solve problems across interdisciplinary domains by using software as a tool



Requirements Outline

Math & Physics (5 courses)

- Calculus
- Linear Algebra
- Differential Equation
- Probability and Random Variable
- Physics and Experiments

Electives (26 courses)

- Discrete structures
- System analysis and design
- Computer networks
- Interactive computer graphics
- Java programming
- ...

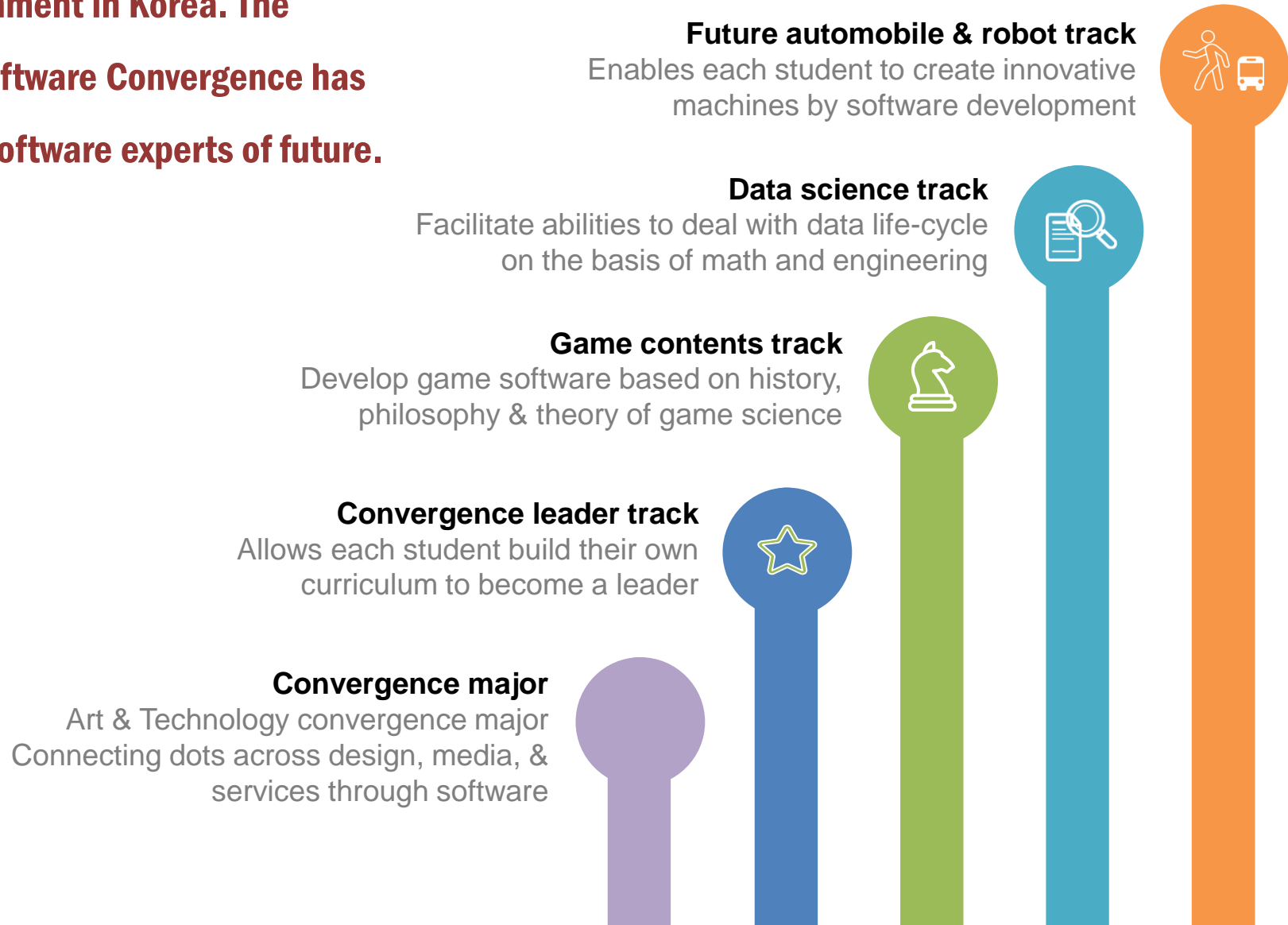
Software Convergence Depth: Add-on-Track (14-17 courses)

- Future automobile & robot track
- Data science track
- Game contents track
- Convergence leader track

Software Convergence Core (14 courses)

- Intro to Software Convergence Engineering
- Design Thinking
- Capstone Design in Software Convergence Engineering
- Objected Oriented Programming
- Web and Python Programming
- Software Development Methods and Tools
- Data Structure
- Algorithm Analysis
- Computer Operating System
- Database
- Software Engineering

Kyung Hee University aims to establish the best and the largest innovative software education environment in Korea. The Department of Software Convergence has started training software experts of future.





Thank you



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