

COURSE DETAIL

MOBILE COMPUTING AND APPLICATIONS

Country

Korea, South

Host Institution

Seoul National University

Program(s)

Seoul National University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

126

UCEAP Course Suffix**UCEAP Official Title**

MOBILE COMPUTING AND APPLICATIONS

UCEAP Transcript Title

MOBILE COMPUTING

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course covers state-of-the-art mobile computing technologies and the development of application software for terminal devices. Due to recent advances in computing technology and wireless communication, multimedia information can now be processed "anytime, anywhere." These mobile computing systems consist of terminals (smartphones, tablet computers, etc.), wired and wireless networks, operating systems/middleware, and the integration of all these enables effective application services. Mobile computing is a key technology based on distributed computing and embedded system technologies, and is applied in ubiquitous systems, mobile commerce, mobile phones, and more.

Topics include Life-Immersive mobile computing, Understanding behavior and contexts, Mobile data, Edge AI systems, AR and VR systems, Efficient ML models (pruning, quantization, neural architecture search, on-device training, knowledge distillation, application-specific optimizations).

The evaluation will be based on four assignments, one mini-project, and the final exam. Students should be aware that there will not be a term project to design and develop a new mobile application.

Language(s) of Instruction

English

Host Institution Course Number

4190.406B

Host Institution Course Title

MOBILE COMPUTING AND ITS APPLICATIONS

Host Institution Course Details

<https://sugang.snu.ac.kr/>

Host Institution Campus

Host Institution Faculty

Host Institution Degree
Host Institution Department
Course Last Reviewed 2025-2026

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