COURSE DETAIL

SMART MEDICAL SENSING SYSTEMS
Country Taiwan
Host Institution National Taiwan University
Program(s) National Taiwan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 119
UCEAP Course Suffix
UCEAP Official Title SMART MEDICAL SENSING SYSTEMS
UCEAP Transcript Title SMART MED SENS SYS
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

The course is designed for senior and graduate students majoring in Computer Science to learn design philosophy, practice, and research challenges for software design for smart medical sensing systems.

Smart sensing systems have the capability of processing the sensing data on the device and the capability of providing the detected events as the outputs. This type of sensing system is required to generate accurate sensing events in real time. The systems are also required to minimize their energy consumption in specific application scenarios. With smart sensing systems, the faults can be contaminated, the system can be more robust and easier to develop. Finally, the systems can be certified for medical use.

This course covers model smart sensing devices, realtime computation, Computing-In-Memory devices, and communications between computing devices.

Language(s) of Instruction
English

Host Institution Course Number
CSIE5375

Host Institution Course Title
DESIGN FOR SMART SENSING SYSTEMS

Host Institution Course Details
https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=922%20U4880&c...

Host Institution Campus

Host Institution Faculty
College of Electrical Engineering and Computer Science

Host Institution Degree

Host Institution Department
Department of Computer Science and Information

Course Last Reviewed
2024-2025

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