

COURSE DETAIL

INTELLIGENT AUTOMATION AND ROBOTICS

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mechanical Engineering

UCEAP Course Number

143

UCEAP Course Suffix**UCEAP Official Title**

INTELLIGENT AUTOMATION AND ROBOTICS

UCEAP Transcript Title

AUTOMATION&ROBOTICS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course examines the latest developments in robotics and their applications in intelligent automation. In addition to academic theory, emphasis is placed on integrated technologies such as electronics, mechanics, and computing. This course also provides hands-on experience in robot development. By writing programs in LEGO MINDSTORMS NXT and NXC, students learn the software development of robots; and by using modules to build robots, students learn hardware development. Project production in class will enable students to acquire all the development procedures and knowledge for various robotics and automation applications. Topics include: Color Sorting Robot (using caterpillar treads), Remote Control for Robotic Arm, Tank, Forklift Truck, Soccer Robot, Obstacle Avoidance Robot, Line Follower.

Language(s) of Instruction

Chinese

Host Institution Course Number

TA11020143

Host Institution Course Title

INTELLIGENT AUTOMATION AND ROBOTICS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

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