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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