SYLLABUS
ENGG3690Y Robotics Special Project: RoboMasters 2023 Robot Contest
Spring-Summer 2022-2023 (4 credits: 3 credits in Spring & 1 credit in Summer)

Course Description
RoboMasters Robot Contest is a robot competition platform created for young engineers. Participating teams will get out of the classroom and independently develop and manufacture robots for the shooting confrontation. The contest will provide them with an opportunity to obtain precious practical skills and use strategic thinking, combine theories with practice and create advanced smart robots through fierce competition. Each year, new game field, rules of competition (https://www.robomaster.com/en-US/robo/rm) and a new technical challenge are introduced to the competition.

Course objectives
- Provide a platform for students with different disciplinary strengths to develop their design and engineering competencies through student-driven project-based learning.
- Support students in attending international engineering

Leaning outcomes
- To gain practical know-how and practice hardware and software prototyping
- To familiarize, understand and design multidisciplinary systems design
- To perform R&D on advanced topics as applicable to competition platforms
- To organize teamwork through effective project, logistics and time management
- To present technical work in both written and oral form
- To compete as a team in an international competition demonstrating leadership and teamwork

Faculty Advisor

Prof. Winnie Leung, eewswleung@ust.hk

Various Meeting Times and Locations

Average 2 hours per week tutorial Average
5 hours per week of project work
Total Learning Hours ~126

Assessment

Assessable Outcomes	Weighting	Rubrics
Training Camp Attendance and Tutorial HW	20%	Attendance 10% 4 Tutorial HW 10%
Internal Competition	25%	Placement 25%-20%-15%-10%
Technical Reporting/ Leadership	25%	Technical contribution 25%
Final Tournament	20%	Placement 20%-15%-10%
Peer Evaluation	10%	