

# Implementation Procedures for Practical Capstone Projects

## Intelligent Computing and Big Data, Chung Yuan Christian University

### Departmental Guidelines for Capstone Project

#### I. Objective

Based on the research directions of the faculty and industry demands, this course provides project topics aligned with students' interests to cultivate practical skills and enhance competitive advantages.

#### II. General Regulations

1. **Timeline:** The course spans two semesters: the second semester of the junior year (Semester 1) and the first semester of the senior year (Semester 2).
2. **Course Instructors:** Each class (Class A and B) will have one instructor responsible for inviting review committee members for the project competition, as well as submitting final grades to the Office of Academic Affairs.
3. **Grouping:** Students shall form groups of 2 to 4 members. Based on their expertise and interests, groups shall select a full-time faculty member from the department to serve as their project advisor and complete the "Advisor Consent Form."
4. **Executive Team:** An executive team consisting of the Department Chair, course instructors, and project advisors will oversee the process.
5. **Project Content:** Course instructors will delegate the formulation and execution of project topics to the advisors, which will be posted on the college/department website.
6. **Advisor Capacity:** As a rule, the maximum number of students per advisor is 150% of the average.
  - *Average = Total students enrolled / Total full-time faculty.*
  - The executive team may adjust student distribution based on actual circumstances.
  - Full-time faculty members have an obligation to advise projects.
7. **Co-Advisors:** If an advisor cannot supervise personally or wishes to co-advise, they may invite co-advisors, including industry experts or part-time faculty.
8. **Initial Review:** Every group must undergo an initial result review during the second semester. Grading criteria are detailed in Section III.

#### III. Grading Policy

1. **First Semester:** Grades are determined by the executive team based on performance, including theoretical or prototype verification, poster and oral

presentations, and a 6-page written report.

2. **Second Semester:** The final grade is composed of the executive team's evaluation (20%) and external reviewers' evaluation (80%). This is conducted via a project competition. Requirements include a practical demonstration, poster or PPT presentation, an electronic abstract, and a 30-page written report.

#### **IV. Project Competition**

1. **Organization:** The executive team organizes the event with assistance from teaching assistants and the Student Association. A committee of internal and external judges will be appointed.
2. **Submissions:** Each group must submit an electronic copy of the final report (approx. 30 pages) to the department office for the project proceedings, a 2-minute short film, and an abstract to be uploaded to the department website.
3. **Judging:** Judges will ask questions and provide feedback during the exhibition. Awards include "Distinction," "Excellence," "Honorable Mention," and "Finalist" (awards may be withheld if standards are not met). Winners receive certificates and scholarships.
4. **External Competitions:** Winning groups are encouraged to participate in off-campus competitions. Additional scholarships will be awarded by the department for those who win external prizes.

#### **V. Templates**

All required document formats and templates can be downloaded from the college/department website.

#### **VI. Implementation**

These regulations are implemented upon approval by the Program Affairs Committee; the same applies to any future amendments.