## Curriculum planning for the 110th grade master class of the Department of Information Engineering, Chunghwa University

May 11, 2021 Passed by the Departmental meeting at its 2nd meeting Approved at the 2nd College Curriculum Meeting of academic year 109, on June 09, 2021

| Sorting    | First grade                              |                                    | second grade                                       |  |
|------------|--|------------------------------------|--|--|
| Compulsory | Seminar                                  | Seminar                            | Seminar<br>Thesis Seminar                          | Seminar<br>Thesis Seminar                    |
| Elective   | Advanced Linear Algebra                  | Multimedia Systems                 | Network Security                                   | Optimization Theory                          |
|            | Digital Signal Processing                | Video Processing                   | Digital Audio Signal Processing                    | Special Topics on Artificial<br>Intelligence |
|            | Advanced Probability and Statistics      | Pattern Recognition                | Evolutionary Computation                           | Concrete Mathematics                         |
|            | Advanced Computer Algorithms             | Color Engineering                  | Computer vision                                    | Multimedia Information                       |
|            | Wireless Networks                        | Embedded System                    | Wireless Sensor Networks                           | Retrieval                                    |
|            | Image Processing                         | Big Data Analysis and Applications | Data Mining  | Unmanned Aerial Vehicle<br>Project           |
|            | Electronic Commerce                      | Deep Learning                      | Deep Learning Project                              |  |
|            | Artificial Intelligence                  | 2 orp 2 mining                     | Internet of Things - Therory and<br>Implementation |  |
|            | Technical Reading and Writing in English |                                    |  |  |
|            | Advanced Machine Learning                |                                    |  |  |
|            | Graph Theory                             |                                    |  |  |
|            | Compiler                                 |                                    |  |  |
|            | Cloud Computing                          |                                    |  |  |
|            |  |                                    |  |  |
|            |  |                                    |  |  |
|            |  |                                    |  |  |

Graduation credits: 24 credits (including four-semester book discussion and two-semester thesis guidance and research) are eligible for graduation. For other regulations, please refer to the regulations for postgraduate studies. Note:

- 1. The bold bottom line represents the basic courses; the bold italics represent the core courses;
- 2. Practical courses, marked with \*
- 3. Elective courses should be opened according to the actual situation of the semester.