# Department of Computer Science and Information Engineering

## Curriculum Requirements for Enrollees in the Academic Year 114 (Fall 2025)

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|---|---|---|---|---|
| Program | Four-year technical college program of the Day Division | | | |
| Group | None | | | |
| Class Type | Regular Class | | | |
| Special Program | None | | | |
| Curriculum Committee | Department Curriculum | 114.04.15 | | |
| | College Curriculum | 114.05.16 | | |
| | University Curriculum | 114.06.09 | | |
| | Academic Affairs | 114.06.09 | | |
| Graduation Credits /Study Duration | At least 128 credits required (normally 4 years). | | | |
| Credit Load per Semester | Students in Grades 1 and 2 must take no fewer than 16 credits and no more than 28 credits per semester. Students in Grades 3 and 4 must take no fewer than 9 credits and no more than 25 credits per semester. | | | |
| Required and Elective | Credits | Subject Category | Credits | |
| Required | 76 Credits | General Education | 19 Credits | |
| | | Major Required | 57 Credits | |
| | | College Major | 0 Credits | |
| Elective | 52 Credits | General Education | 8 Credits | |
| | | Major Elective | 44 Credits | |
| Graduation | Course Title | Description | | Regulations/Notes |
| Cross-disciplinary Credit Courses | Cross-disciplinary Program Learning(0/1) | Students must complete at least one (micro) credit program offered by their respective college before graduation, or a (micro) credit program from another college with the approval of their own college. | | 1.Regulations for the Establishment of Credit Programs |
| Cross-disciplinary Credit Program | Digital Technology Micro- Credit Program Learning(0/1) | A Micro-Credit Program in Digital Technology offered by the student’s respective college | | 2.Guidelines for the Implementation of Interdisciplinary (Micro) Credit Programs |
| English Certificate | English Proficiency Test(0/2) | Students must pass the General English Proficiency Test (GEPT) Basic Level (or equivalent) during their studies. | | 1.Principles for the Implementation of English Courses and English Proficiency Graduation Requirements |
| Practical Project | Practical Project(2/2) | According to the regulations of each department | | 1.Regulations for the Implementation of “Practical Projects, Special Projects, Research Projects, and Graduation Design”<br>2.Regulations of Each Department |
| Other Regulations | | | | |
| Remarks | "Computer Course" means computer access is required (computer and internet usage fee).<br>Graduation Requirements：<br>「G01」：Cross-disciplinary Credit Program: Cross-disciplinary Learning<br>「G02」：Cross-disciplinary Credit Program: Digital Technology Micro Program<br>「G03」：English Proficiency Certificate<br>「G04」：Practical Project | | | |
| First Semester, First Year | | Second Semester, First Year | | |

| Course | Course | Course Name | Credits / Hours | Notes | Course | Course | Course Name | Credits / Hours | Notes |
|---|---|---|---|---|---|---|---|---|---|
| General Education | 496818 | Literary Appreciation and Expression | 2/2 | | General Education | 496518 | Human Rights and Legal | 2/2 | |
| General Education | 492001 | | 2/2 | | General Education | 496918 | Practical Chinese | 2/2 | |
| General Education | 4912C0 | Physical Education(1) | 2/2 | | General Education | 492002 | English (II) | 2/2 | |
| General Education | 490318 | Community Service & Learning(1) | 0.5/1 | | General Education | 4912D0 | Physical Education(2) | 2/2 | |
| General Education | 497A00 | | 2/2 | | General Education | 490418 | Community Service & Learning(2) | 0.5/1 | |
| Major Required | 40I066 | Introduction to Computer Science | 3/3 | Computer Course | General Education Liberal Arts Elective | 497B00 | | 2/2 | |
| Major Required | 40IA26 | Discrete Mathematics | 3/3 | | Major Required | 40IA41 | Linear Algebra | 3/3 | |
| Major Required | 40IA42 | Programming Language(1) | 3/3 | Computer Course | Major Required | 40IA43 | Programming Language(2) | 3/3 | Computer Course |
| Major Required | 40IA48 | Physics | 3/3 | | Major Required | 40IA58 | Laboratory of Physics | 2/2 | |
| Major Required | 40IA49 | Calculus | 3/3 | | Major Elective | 40INH2 | Python Programming | 3/3 | Computer Course |
| | | | | | | | | | |
| 23.5 Credits, 24 Hours | | | | | 21.5 Credits, 22 Hours | | | | |
| First Semester, Second Year | | | | | Second Semester, Second Year | | | | |
| Course | Course | Course Name | Credits / Hours | Notes | Course | Course | Course Name | Credits / Hours | Notes |
| General Education | 492003 | English(III) | 2/2 | | General Education | 496418 | Contemporary Taiwan and Moder World | 2/2 | |
| General Education | 497C00 | | 2/2 | | General Education | 497D00 | | 2/2 | |
| Major Required | 40IA23 | Data Structure | 3/3 | Computer Course | Major Required | 40IA16 | Digital System Design | 3/3 | |
| Major Required | 40IA36 | Electronic Circuits | 3/3 | | Major Required | 40IA22 | Computer Architecture | 3/3 | |
| Major Required | 40IA46 | Digital Logic Design | 3/3 | | Major Required | 40IA44 | Practice of Electronic Circuits | 3/3 | |
| Major Elective | 40IN02 | Morality and Professional Ethics | 2/2 | | Major Required | 40IA53 | Probability and Statistics | 3/3 | |
| Major Elective | 40IN58 | Electrical Circuits | 3/3 | | Major Elective | 40IN01 | Career Consulting | 2/2 | |
| Major Elective | 40IN60 | Engineering Mathematics | 3/3 | | Major Elective | 40INL4 | Data Base Management System | 3/3 | Computer Course |
| Major Elective | 40INL1 | Object Oriented Programming | 3/3 | Computer Course | Major Elective | 40INL5 | Java Programming | 3/3 | Computer Course |
| Major Elective | 40INL2 | Principle and Practice of Computer Network | 3/3 | Computer Course | Major Elective | 40INL6 | Embedded System Overview | 3/3 | Computer Course |
| Major Elective | 40INL3 | Web User Interface (UI) Design | 3/3 | Computer Course | Major Elective | 40INL7 | Frontend Web Development and Design | 3/3 | Computer Course |
| Major Elective | 40INP7 | English for Computer Science and Engineering | 2/2 | | Major Elective | 40INP3 | Information Security | 3/3 | Computer Course |
| | | | | | | | | | |
| 32 Credits, 32 Hours | | | | | 33 Credits, 33 Hours | | | | |
| First Semester, Third Year | | | | | Second Semester, Third Year | | | | |
| Course | Course | Course Name | Credits / Hours | Notes | Course | Course | Course Name | Credits / Hours | Notes |

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|---|---|---|---|---|---|---|---|---|---|
| Major Required | 40IA38 | Algorithm | 3/3 | Computer Course | Major Required | 40IA24 | Operating Systems | 3/3 | |
| Major Required | 40IA47 | Microcomputer Theorem and Practice | 3/3 | Computer Course | Major Required | 40IA50 | Forums of Computer Science and Information Engineering | 2/2 | |
| Major Elective | 40IN38 | Signals and Systems | 3/3 | | Major Elective | 40IN23 | Originality Thinking Training | 2/2 | |
| Major Elective | 40INE7 | Artificial intelligence | 3/3 | Computer Course | Major Elective | 40IN48 | Digital Signal Processing | 3/3 | |
| Major Elective | 40INL8 | Java Application Practice | 3/3 | Computer Course | Major Elective | 40INF9 | Introduction to Cloud Management | 3/3 | |
| Major Elective | 40INL9 | Assembly Language Programming | 3/3 | Computer Course | Major Elective | 40INI4 | Deep Learning | 3/3 | Computer Course |
| Major Elective | 40INM1 | Numerical Methods | 3/3 | Computer Course | Major Elective | 40INM6 | Defensive and Offensive Cybersecurity | 3/3 | Computer Course |
| Major Elective | 40INM2 | Software Engineering | 3/3 | Computer Course | Major Elective | 40INM7 | Embedded System Design | 3/3 | Computer Course |
| Major Elective | 40INM3 | Introduction to Internet of Things | 3/3 | Computer Course | Major Elective | 40INM8 | Smart Phone Programming | 3/3 | Computer Course |
| Major Elective | 40INM4 | Practice of Intelligent Robot | 3/3 | Computer Course | Major Elective | 40INO1 | Full Stack Web Development and Management Practice | 3/3 | Computer Course |
| Major Elective | 40INM5 | Backend Web Development and Design | 3/3 | Computer Course | Major Elective | 40INO9 | The Practice of IOT Integration System | 3/3 | Computer Course |
| Major Elective | 40INP4 | System and Cybersecurity | 3/3 | | | | | | |
| | | | | | | | | | |

36 Credits, 36 Hours

First Semester, Fourth Year

| Course | Course | Course Name | Credits / Hours | Notes |
|---|---|---|---|---|
| General Education | 492118 | English Proficiency qualification | 0/2 | G03 |
| Major Required | 40IA35 | Practical Project | 2/4 | G04 |
| Major Elective | 40ING2 | Big Data Analysis | 3/3 | Computer Course |
| Major Elective | 40IN33 | Project Management | 3/3 | |
| Major Elective | 40INB7 | Practice of Image Processing Systems | 3/3 | |
| Major Elective | 40ING6 | Innovation and Entrepreneurship | 2/2 | |
| Major Elective | 40INI5 | Field Practice(1) | 12/12 | |
| Major Elective | 40INK4 | Summer Internship | 3/3 | |
| Major Elective | 40INO3 | Cloud Computing Practices | 3/3 | Computer Course |

31 Credits, 31 Hours

Second Semester, Fourth Year

| Course | Course | Course Name | Credits / Hours | Notes |
|---|---|---|---|---|
| College Major | 40TND9 | Interdisciplinary program learning | 0/1 | G01 |
| College Major Required | 40TNF1 | Interdisciplinary Micro Course Program for Engineering Digital Technology | 0/1 | G02 |
| Major Elective | 40INI3 | Practical Applications of Artificial Intelligence | 3/3 | Computer Course |
| Major Elective | 40INI6 | Field Practice(2) | 12/12 | |
| Major Elective | 40INJ5 | Laws and Ethic in Information Security | 3/3 | |
| Major Elective | 40INO7 | Server Virtualization Practice | 3/3 | Computer Course |
| Major Elective | 40INO8 | Practicing of 3D Printing | 3/3 | Computer Course |
| Major Elective | 40INP2 | Practical Training | 2/2 | |
| Major Elective | 40INP6 | Practices of Extended Reality Applications | 3/3 | Computer Course |

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|---|---|---|---|---|---|---|---|---|---|
| Major Elective | 40IN06 | Theory and Applications for Sensors | 3/3 | Computer Course | | | | | |
| Major Elective | 40INP1 | Practice of XR Programming | 3/3 | Computer Course | | | | | |
| | | | | | | | | | |
| 37 Credits, 41 Hours | | | | | 29 Credits, 31 Hours | | | | |