# Education Plan for Academic Graduate in Computer Science & Technology

## （Discipline Code:0812,Award Master Degree of Engineering）

### Ⅰ. Objectives

1. Abide the law, form a good character, behave honestly and trustworthy, strictly and corporately, and maintain good research ethics and professionalism.

2. Master broad and solid basic theories and systematically in-depth specialized knowledge of the discipline, be qualified in higher levels of teaching, researching, engineering technology and technological management and can make innovative achievements in the discipline or specific technology.

3. Master a foreign language, can skillfully read professional foreign language materials and write papers.

4. Maintain a good physical and mental health quality.

### Ⅱ.Disciplinary Research Areas

1. Computer System Architecture
2. Computer Software and Theory
3. Computer Application Technology

### Ⅲ. Educational System and Years of Study

The educational system for a full-time academic graduate is three years and the study period lasts generally three years, no more than five years.

### Ⅳ. Curriculum System and Credit Requirements

The total credits for academic graduates should not be less than 27 credits, where the public degree course credits are not less than 11 credits, the professional degree course credits are not less than 6 credits, the compulsory courses credits are not less than 5 credits.

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| Degree Courses / Public | 003281001 | First Foreign Language(Chinese) | 108 | 6 | 1　　2 | School of Internation Education | |
| | 003281002 | Introduction to China | 54 | 3 | 1 | School of Internation Education | |
| | 01421062 | Matrix Theory | 36 | 2 | 1 | School of Science | |

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| | 01421063 | Applied Mathematical Statistics | 36 | 2 | 1 | School of Science | At least 2 courses required |
| | 01421064 | Stochastic Process | 36 | 2 | 2 | School of Science | |
| | 01421066 | Mathematical Model | 36 | 2 | 2 | School of Science | |
| Professional Degree Courses | 01021802 | Advanced Principal and Technology of Artificial Intelligence | 54 | 3 | 1 | School of Computer Science | |
| | 01021803 | Modern Computer Architecture | 54 | 3 | 1 | School of Computer Science | |
| | 01021804 | High-Performance Computer Networks | 54 | 3 | 1 | School of Computer Science | |
| | 01021805 | Modern Software Engineering | 54 | 3 | 1 | School of Computer Science | |
| | 01021806 | Modern Database Technologies | 54 | 3 | 1 | School of Computer Science | |
| | 01021808 | Introduction of Reliability Engineering | 54 | 3 | 1 | School of Computer Science | |
| | 01021815 | Computer Vision | 54 | 3 | 2 | School of Computer Science | |

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| Elective Courses | 01022801 | Fundamentals of Algorithms | 36 | 2 | 1 | School of Computer Science | |
| | 01022802 | Advanced English in the Discipline of Computing | 18 | 1 | 2 | School of Computer Science | Required |
| | 01022804 | E-commercia and E-governer | 36 | 2 | 2 | School of Computer Science | |
| | 1022805 | Artificial Neural Network and Its Application | 36 | 2 | 2 | School of Computer Science | |
| | 1022601 | Combinatorics | 36 | 2 | 1 | School of Computer Science | |
| | 1022602 | Theory of Computational Complexity | 36 | 2 | 1 | School of Computer Science | |
| | 1022604 | ERP ERP Principles and Practice | 36 | 2 | 1 | School of Computer Science | |
| | 1022605 | Formal Languages and Automata | 36 | 2 | 1 | School of Computer Science | |
| | 1022608 | Software Architecture | 36 | 2 | 2 | School of Computer Science | |
| | 01022813 | Knowledge Discovery and Data Mining | 36 | 2 | 2 | School of Computer Science | |

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| | 01022814 | Software Development Pattern | 36 | 2 | 2 | School of Computer Science | |
| | 01022816 | Integration of Modern Information Systems | 36 | 2 | 2 | School of Computer Science | |
| | 01022817 | Mining of Massive Datasets | 36 | 2 | 2 | School of Computer Science | |
| | 01022818 | Development and Application of Embedded Systems | 36 | 2 | 2 | School of Computer Science | |
| | 01022819 | Design on Real-time Systems | 36 | 2 | 2 | School of Computer Science | |
| | 01022821 | Distributed Parallel Processing | 36 | 2 | 2 | School of Computer Science | |
| | 01022825 | Cloud Computing and Service Computing | 36 | 2 | 1 | School of Computer Science | |
| | 01022606 | Advanced Computer Graphics | 36 | 2 | 1 | School of Computer Science | |
| | 01022609 | IT Managing IT Projects | 36 | 2 | 2 | School of Computer Science | |
| | 01022610 | Network and Information Security | 36 | 2 | 2 | School of Computer Science | |

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| | 01022611 | Multmedia Technology of Application | 36 | 2 | 2 | School of Computer Science | |
| | 01022613 | Localization Technology for IoT | 36 | 2 | 2 | School of Computer Science | |
| | 01022614 | Wireless Sensor Networks | 36 | 2 | 2 | School of Computer Science | |
| | 01022615 | Field Bus Technology | 36 | 2 | 2 | School of Computer Science | |
| | 01022616 | The Theorey and Application of Pattern Recognition | 36 | 2 | 2 | School of Computer Science | |
| | 01022617 | The Technologies towards Semantic Web | 36 | 2 | 2 | School of Computer Science | |
| | 01022618 | Grid and High Performance Computing | 36 | 2 | 2 | School of Computer Science | |
| | 01022808 | Web Practices of Web Data Management | 18 | 1 | 1 | School of Computer Science | At least 1 course required |
| | 01022828 | The Application of Cloud Computing | 18 | 1 | 1 | School of Computer Science | |
| | 01022829 | The Integrated design of Embedded system and IoT | 18 | 1 | 2 | School of Computer Science | |
| | 01022830 | The Design of Software Engineering Project | 18 | 1 | 2 | School of Computer Science | |

| Course Category | Course No. | Course Name | Hour | Credit | Semester | School | Remark |
|---|---|---|---|---|---|---|---|
| | 01022831 | Design of Information Security | 18 | 1 | 2 | School of Computer Science | |
| Interdisciplinary elective course | 02223001 | Taijiquan and its | 18 | 1 | 1 | Department of Physical Education | |
| Compulsory Courses | 01024004 | Thesis Proposal | | 1 | 3 | School of Computer Science | |
| | 01024005 | Internship and Practical Training | | 3 | 1 | School of Computer Science | |
| | 01024006 | Academic Activities | | 1 | 3 | School of Computer Science | |