**Curriculum of Computer Science and Technology for PhD students**

Table 1 Curriculum of Computer Science and Technology for PhD students

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| **Type** | **Course Code** | **Course Name** | **Hours** | **Credit** |
| Public Degree Courses | B0800000Q | Philosophy | 36 | 2 |
|  | English | 72 | 2 |
| Discipline  Degree Courses | B0300101Q  (Select one out of seven courses) | Computer mathematics | 36 | 2 |
| Functional Analysis |
| Statistics |
| Matrix Analysis |  |  |
|  | Modern Mathematical Foundation |
| Fuzzy Optimization |
| B0300102Q | Advanced Computer Architecture | 36 | 2 |
| B0300103Q | Theory and Methods of Machine Learning | 36 | 2 |
| selective Courses | B0300104C | Automation of Computer Design | 36 | 2 |
| B0300105C | Mobile Computing Theory | 36 | 2 |
| B0300106C | Trusted Computing Theory | 36 | 2 |
| B0300107C | Ubiquitous Computing | 36 | 2 |
| B0300108C | New Technology of Database | 36 | 2 |
| B0300109C | Service Oriented Computing | 36 | 2 |
| B0300110Q | Bioinformatics | 36 | 2 |
| B0300111C | New Software Architecture | 36 | 2 |
| B0300112Q | Theory, System and Application of Audio and Video Coding & Decoding | 36 | 2 |
| B0300113Q | Biometric Feature Recognition | 36 | 2 |
| B0300114Q | Statistical Natural Language Processing | 36 | 2 |
| B0300115Q | Distributed Information Processing | 36 | 2 |
| B0300116C | Intelligent Robot Planning | 36 | 2 |
| B0300117C | Advanced Pattern Recognition Technology | 36 | 2 |
| B0300118C | Speech Signal Processing | 36 | 2 |
| B0300119C | Multimedia Computing and Pattern Mining | 36 | 2 |
| B0300120C | Analysis and Understanding of Human Movement Intelligence | 36 | 2 |
| B0300121Q | Theory of Information Security | 36 | 2 |
| B0300122Q | Mathematical Base for Information Security | 36 | 2 |
| B0300123Q | Cryptanalysis | 36 | 2 |
| B0300124Q | Network Behavior | 36 | 2 |
| B0300125Q | Steganalysis | 36 | 2 |
| B0300126C | Analysis and Design Security Protocol | 36 | 2 |
|  | Comprehensive Evaluation |  | 1 |
|  | Thesis Proposal |  | 1 |
|  | Mid-term Inspection |  | 1 |
|  | Academic Activities |  | 1 |
|  | Social Practice |  | 1 |

**Supplementary notes:**

1. Credits

(1) Academic Activity Credit: Doctoral candidates canreceive1 creditfrom their academic activities, ifthey participate in at least 8 academic activities, such as international or domestic academic conferences, academic seminarsandsymposiums held in HIT.

(2) Social Practice Credit: Doctoral candidates canreceive 1 creditfrom social practice,ifthey participate in at least 2 practices, such as social survey, industrial intern, volunteer service, innovation competition and so on.

2. Comprehensive assessment of the first year

The comprehensive assessment of doctoral candidatesconsists of two parts: Supervisor assessment(20%) and school assessment(80%). The school assessment generally includes fundamental knowledge, scientific research quality and potential assessment. The qualified doctoral candidates will recieve 1 credit, and continue to do their research work. The students whodo not pass the qualification (listed in the last 10-20%) will be given a yellow card warning, and are allowed to apply for a second comprehensive assessment after three months. If they failedit again, they will lose the chance to study for their doctor degree.

3. Proposal report

The doctoral proposal report meeting is organized twice in each semester. Each doctoral candidate should finish the proposal report before the end of the fourth semester. The content of proposal report should cover research background, the related work survey, scientific problem, and potential creative achievements.

4. Academic papers

The number and level of papers published by doctoral candidates is abasic requirement of degree awarding. Doctoral candidate should publish at least 1 paper on the top transaction journals or 2 papers on ESI journals in the related research area.

5. Mid-term exam

Doctoral candidatesshoud pass the mid-term exam in the end of the third year of enrollment.In the exam, 5 professors are invited to evaluate the comprehensive ability of candidates, the progress of the research work. The students who passed the exam can carry out the work of the paper continually. Those who do not pass will be given a yellow card warning and should attend the second exam in the next year; if they failed it again,they will be dismissed from the school.

6. The pre-defense and defense of dissertation

The pre-defense of doctoral dissertationis an important part of the quality of the research work. After completing the draft which is approved by the supervisor, a doctoral candidate can apply for the discipline of the pre-defense application. The school will designate a responsible expert to review the dissertation. Then, the school will orgnize a defense committee, which consist of 5-7 professors, to evaluate the qualification for a doctoral degree.