

Information Engineering (B.Eng. Program of BUPT)

Mathematics & Physics

Mathematics:

- **Mathematic Analysis I (86)**
- **Mathematic Analysis II (89)**
- **Linear Algebra (92)**
- **Engineering Mathematics**
- **Probability Theories and Mathematical Statistics (92)**
- **Discrete Mathematics (90)**
- **Mathematical Experiments (95)**

Physics:

- **University Physics I (89)**
- **University Physics II**

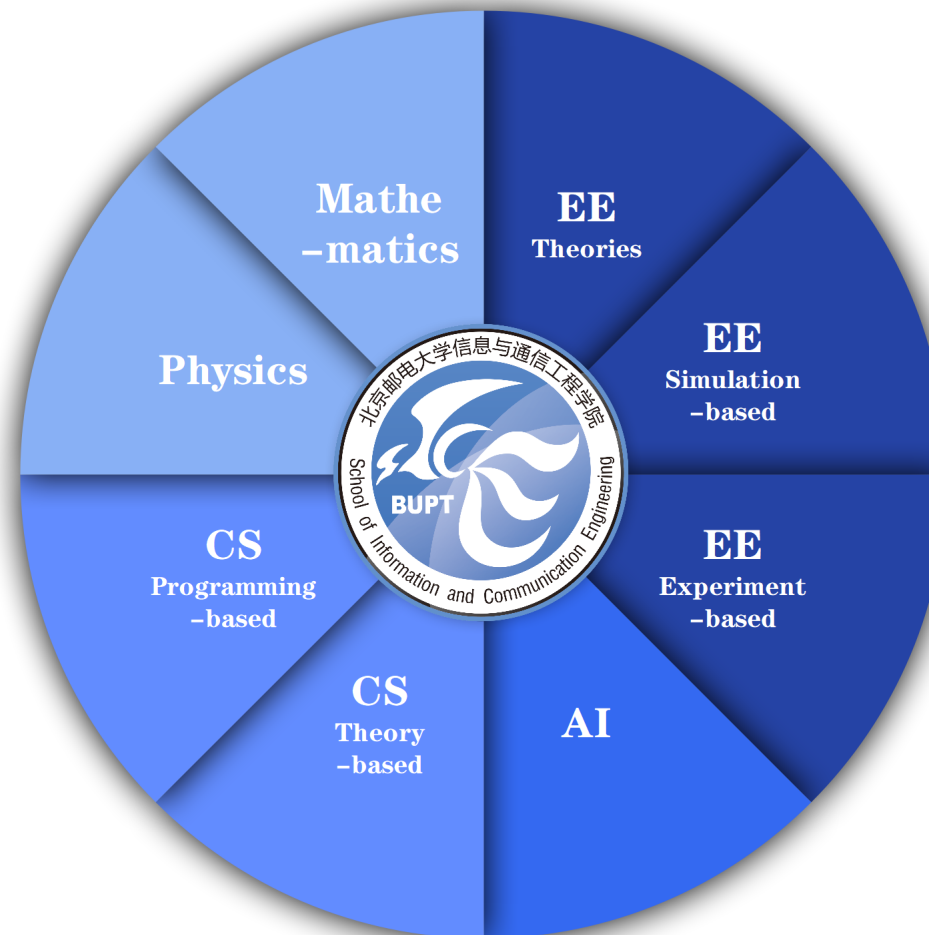
Computer Science

Programming-based:

- **Python (Major Coding Language)**
 - Python Programming (89)
 - Comprehensive Experiment of Programming (85)
- **C/C++ (Simulations)**
 - C/C++ Programming
- **Java (APP Development)**
 - Information System Design (92)
 - Curriculum Design on Smart Mobile Terminals (95)
- **SQL (Database Development)**
 - Database System and Cloud Storage (86)

Theory-based:

- **Data Structures and Algorithms**
- **Computer Principle and Application (90)**
- **Computer Networks and Internet (97)**



Electronic Engineering

Theories:

- **Electronic and Circuit Foundation (94)**
- **Digital System Design (89)**
- **Signals and Systems (86)**
- **Digital Signal Processing (87)**
- **Wireless Internet of Things: Fundamental Theories and Application (88)**
- **Principles of Communication I (96)**
- **Information Theory (99)**
- **Random Signal Analysis (98)**
- **Basic Theories of Networks (98)**
- **Information Processing and Coding (85)**

Simulation-based:

- **Modeling and Simulation of Information Network (91)**
- **Experiment of Electronic and Circuit Foundation I (91)**
- **Principles of Communications Laboratory (96)**

Experiment-based:

- **Introduction of Information and Communication Engineering (Good)**
- **Experiment of Electronic and Circuit Foundation II**
- **Experiment of Digital System Design (91)**
- **Practicum in Electronic Techniques (87)**

Artificial Intelligence

Theories:

- **Introduction to Artificial Intelligence (100)**
- **Artificial Intelligence and Social Development (89)**
- **Cognitive and Artificial Intelligence (97)**

Applications:

- **Pattern Recognition and Applications (94)**
- **Natural Language Understanding (Studying)**

NOTE: This graph serves ONLY as a reference to the course structure of the program. Courses that are displayed in grey are elective/optional. Underlined courses could be of fundament to specializations in fields of Robotics.