## Complete List of Courses

## **Compulsory Courses**

- Java Programming, Base Course
- Java Programming, Advanced Course (Data structures and Algorithms)
- Design of Digital Circuits A Systems Approach
- Computer Organization
- Electronics
- Physics of Devices / Component Physics
- Electromagnetic Field Theory
- Analogue Circuits
- Project in Electronics and Sustainable Development
- Electrical Measurements
- Electric energy Engineering
- Signal Processing in Multimedia
- Computer Communication
- Physics Mechanics and Waves
- Physics Thermodynamics and Atomic Physics
- Linear Algebra
- Calculus in Several Variables
- Calculus in one Variable
- Mathematics Analytic Functions
- Mathematics Systems and Transforms
- Numerical Analysis
- Mathematical Statistics
- Automatic Control
- Managerial Economics

## **Optional Courses**

- Micro Sensors: MEMS Theory, Fabrication and Integration
- Structured VLSI Design on Silicon (CMOS)
- Digital and Analogue Projects
- Digital IC-Design
- DSP-Design
- Integrated A/D and D/A Converters
- Advanced Analogue Design
- Software Development for Large Systems
- Introductory Course in Chinese for Engineers, Part 1
- Introductory Course in Chinese for Engineers, Part 2

## Courses Exceeding the Degree Requirements

- Chinese: Level 1 B<sup>1)</sup>
- Chinese: Level 2<sup>1)</sup>
- Introduction to Chinese Society, Culture and Language