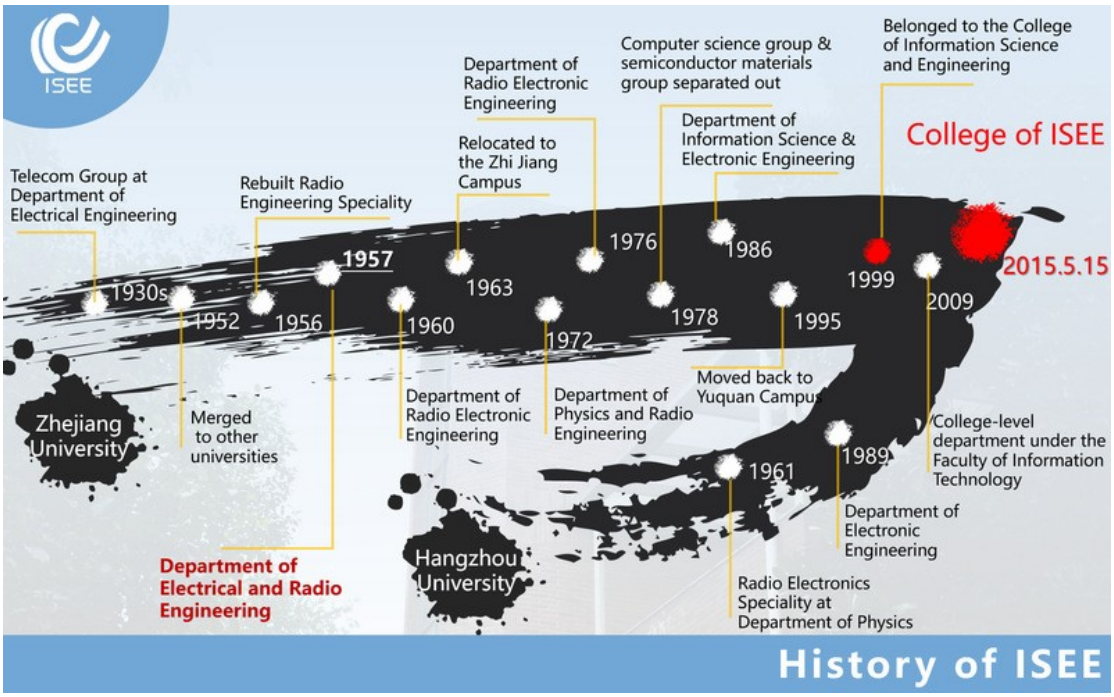
BRIEF INTRODUCTION OF COLLEGE OF INFORMATION SCIENCE AND ELECTRONIC ENGINEERING (ISEE)



The College of ISEE is amongst the top teaching and research colleges in China, and is one of the largest engineering colleges at Zhejiang University with an annual enrolment of over 300 undergraduate students. We also have a strong global reputation (ranked **39th**in the QS World University rankings by subject 2017) in recognition of our world class academics and researchers.

Aiming to nurture and educate engineering leader for the Information World of today and tomorrow, the College of ISEE offers two bachelor degree programmes to provide an all-round engineering education: **Information Engineering** and **Electronics Science and Technology**. We currently have over 110 faculty members with diverse expertise in the fields of communication and networks, signal processing, physics electronics, circuits and systems, microelectronics and optoelectronics, electromagnetic and photonics, etc.

STRUCTURE OF INFORMATION ENGINEERINGPROGRAMME

Overview: Information engineering encompasses Telecommunications, Networking, Signal and Information Processing - all important and fast-growing industries in today's Information Age. This degree will provide students with an understanding of the entire stack of modern networked computers, from the design and architecture of the CPU in a smart-phone, to the information theory and wireless protocols connecting it to the internet, and on to the operating systems and databases providing back-end support in the cloud.

Study programme:

In each year of your degree you will take a number of individual modules. In the first and second years you will cover material fundamental to information engineering. In the third year, you tailor your degree to fit your interests and choose from a number of advanced topics that broaden and

deepen the material covered in years one and two. Project work is undertaken every year, and your final year will include a substantial individual project.

Modules:

Please note that the curriculum of this course is currently being reviewed as part of a College-wide process to introduce a standardised modular structure. As a result, the content structures of this course may change for your year of entry.

Orientation and Professional Development
Engineering Orientation
Foundational Mathematics and Science
Calculus Ⅰ
Calculus Ⅱ
Calculus Ⅲ
Intro to Differential Eq Plus
General Chemistry Ⅰ
General Chemistry Lab Ⅰ
University Physics: Mechanics
University Physics: Elec & Mag
Univ Physics: Quantum Physics
Electrical Engineering Technical Core
Intro to Electronics
Intro to Computing
Computer Systems & Programming
Analog Signal Processing
Digital Signal Processing
Digital Signal Processing Lab

Probability with Engineering Application
Fields and Waves I
Digital Systems Laboratory
Computer Organization & Design
Communications Systems
Final Year Project
Composition
Principles of Writing
Principles of Research
Technical Electives
Semiconductor Electronics
Electronic Circuits
Fields and Waves II
Computer Systems Engineering
Embedded Systems
Communication Networks
Artificial Intelligence
Liberal Education
Humanities & Arts
Social & Behavioral Sciences
Culture Studies
Free Electives

ZJU Required Liberal Education
Chinese Ⅰ
Chinese Ⅱ
Chinese Ⅲ
Chinese Ⅳ
China Survey

STUDENT LEARNING OUTCOMES

Our students will have the following capabilities upon completion of their degrees:

- An ability to apply knowledge of mathematics, science and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice
- An ability to identify, formulate and solve engineering problems
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
- An understanding of professional and ethical responsibility
- A knowledge of contemporary issues
- An ability to communicate effectively
- An ability to function on multidisciplinary teams
- A recognition of the need for and an ability to engage in life-long learning

Careers

Our graduates are highly sought after worldwide for a wide range of careers in fields such as **telecommunications**, **artificial intelligence**, **ocean observation**, **national defense**, etc. Whether your careers start off in China or anywhere across the globe, a journey started at ISEE will help you thrive.

Contact

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