

Control Science and Engineering (Master's and Doctoral program)
College of Control Science and Engineering, Zhejiang University www.cse.zju.edu.cn
Introduction
The College of Control Science and Engineering (CSC) was founded in 1956. For more than 50 years, we CSE people have built a history of excellence in education and discovery, and our college is now one of the most prestigious research and education bases in the area of industrial process control in China. National and international research labs and centers are instituted in our CSE college, which includes the institute of industrial process control, the institute of automatic instrumentation, the institute of cyber-systems and control, the state key laboratory of industrial control technology, the national engineering research center for industrial automation, and an experiment and teaching center for automation.
Research Fields
<ol style="list-style-type: none"> 1. Theoretic research on control science: fundamental research on the theories and methodologies of variable structure control, control of large time-delay systems, adaptive control, predictive control, intelligent control, etc; fundamental research on the methodologies and technology of system modeling. 2. Automation instrumentation and related systematic research: theoretic research and related technology; instruments development on field bus technology; intelligent instruments; technology of industrial control networking; novel measuring and detection technology; testing system; and reliability technology. 3. Research on systems engineering and optimization: practical optimization methods and technology, decision support, supply chain, neural networks, data rectification, data mining, and research on theories, methods, and technology of the “whole solutions to integrated automatic systems of process-based industrial enterprises”. 4. Research on robotics technology: intelligent robotic system, multi-agent system, real-time pattern recognition and behave system, real-time planning and reasoning, micro-sensor and micro-actuators.
Core Courses
Advanced Automation, Matrix Theory, Nonlinear Control Systems, Processing Soft Measurement, Introduction to Control System Safety & Security Engineering, System Identification, Control and Optimization of Power and Wireless Networks, Cyber Physical System, and etc