学院简介







冶工组匕 夕庙鹏

清华大学信息科学技术学院(以下简称:信息学院)组建于1994年,目前由4个系、3个研究实体、1个国家示范性软件学院组成,有1个国家集成电路人才培养基地、2个国家工程技术研究中心和4个国家工程实验室,是科技部批准组建的6个国家研究中心之一"北京信息科学与技术国家研究中心"的具体依托单位。信息学院是清华大学规模最大的学院之一,拥有6个一级学科,22个二级学科,5个博士后流动站;设有电子信息科学与技术、微电子科学与工程、计算机科学与技术、自动化、软件工程5个本科专业;现有事业编制教职工556人(其中教师455人,教学辅助人员70人),在校学生6984人(其中本科生2906人,硕士生2191人,博士生1887人)。

组织机构

计算机科学与技术系 Department of Computer Science and Technology 自动化系 Department of Automation 微电子与纳电子学系 (微电子学研究所) Department of Microelectronics and Nanoelectronics (Institute of Microelectronics) 软件学院 School of Software 信息技术研究院 Research Institute of Information Technology 网络科学与网络空间研究院 Institute for Network Sciences and Cyberspace 国家计算机集成制造系统工程技术研究中心 National CIMS Engineering Research Center 国家企业信息化应用支撑软件工程技术研究中心 National Enterprise Information Software Engineering Research Center

下一代互联网核心网国家工程实验室

National Engineering Laboratory for Next Generation Internet Backbone 数字电视国家工程实验室(北京) National Engineering Laboratory for Digital Television(Beijing)

电子商务交易技术国家工程实验室

National Engineering Laboratory

大数据系统软件国家工程实验室

National Engineering Laboratory for Big Data Software

电子工程系

這息学科群统计数据

学科建设

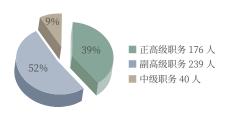
一级学科



教师队伍

截至 2019 年底, 信息学院共有教师 455 人, 有 140 人入选各类国家人才计划。

教师结构



杰出人才

中国科学院院士	6
中国工程院院士	7
长江学者特聘教授	17
国家杰出青年科学基金获得者	41
中青年科技创新领军人才	10
青年长江学者	11
优秀青年科学基金获得者	40
青年拔尖人才	8

科学研究

国家科技奖励

2010-2019 年,信息 学院累计获得国家科技奖励 40 项(作为第一完成单位获得 30 项,作为参与单位获得 10 项),包括国家自然科学奖 9 项,国家技术发明奖 15 项,国家科学技术进步奖 16 项。





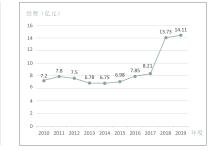


2010-2019 年作为第一完成单位获三项一等国家科技奖励

论文专著专利

年度			专著	专利		
	总数	SCI		々有		
2009	2487	459	869	23	371	248
2010	2459	451	761	18	528	255
2011	2113	501	774	18	560	309
2012	2000	523	585	24	545	426
2013	2158	680	847	27	647	380
2014	2136	689	667	21	565	317
2015	2142	639	814	23	497	371
2016	1546	735	882	15	522	477
2017	2054	744	687	22	761	511
2018	2102	662	未统计	17	745	520
总计	21197	6083	6886	208	5741	3814

科研经费



信息学院特色工作

学生培养

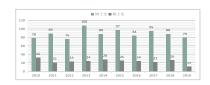
特色课程

信息学院目前包含电子信息类、计算机类、自动化类3个本科大类。电子信息类课程覆盖信息光电子、通信、微波、信息认知、微电子与电子电路、信息系统、生医工程等专业方向;计算机类课程涵盖了高性能计算、网络技术、软件工程、人机交互与媒体、智能技术与系统、网络空间安全、信息管理、理论计算机科学、量子计算、类脑计算等专业方向;自动化类课程基于宽口径的基础课程体系,以数理、信息理论、控制理论、系统理论等知识为核心、旨在培养工程、信息技术与管理技能并重的复合型创新人才。

信息学院从2003年起面向全院大一新生开设《信息科学技术概论》通识类必修课,课程内容涵盖信息科学技术的内涵、现状和对社会进步产生的作用,涉及信息学院相关学科研究方向介绍、未来信息技术发展趋势以及对其它学科的推动等。

研究生出席国际会议

为支持信息学院学生出国参加高水平的国际学术会议,促进学生与国际顶尖学者直接交流与沟通,了解所在学科研究领域的最新进展和动态,2004年,清华校友邓锋先生在信息学院捐资设立并启动研究生出席国际会议基金,2010年更名为"登峰基金"。在基金发展过程中,先后获得了邓锋先生、清华大学、日本株式会社野村综合研究所、无锡儒安科技有限公司和赵仕勤先生的捐助。2010-2019年,该基金共资助1118名研究生,受资助学生足迹遍布40余个国家和地区。



2010-2019 年受资助博士生、硕士生人数

高水平国际竞赛

为进一步加大信息学院国际化人才培养力度,提升学生的学术水平与创新能力,自 2017年9月起,信息学院扩大"登峰基金"支持范围,增设了高水平国际竞赛项目,用于支持信息学院学生参加高水平国际竞赛。截至 2019年底,共资助高水平国际竞赛团队 9个,受资助团队均在国际大赛中取得了优异成绩。

交换生项目

为培养学生国际化视野,提高学生国际交流能力和科研创新能力,2006年,清华大学和美国南加州大学两校共同的校友邓锋先生捐资设立了专项基金,用于支持清华信息学院-南加大工学院本科生暑期交换项目。2010-2019年,参与交换的学生人数共计140人。

学生奖励

为支持清华大学的教育事业,奖励学生勤奋学习,培养更多的优秀人才,英特尔公司出资在清华大学设立了"清华大学-英特尔奖学金",专门奖励在信息科学与工程技术领域内有独立工作能力,并具有科研能力和创新精神的信息学院优秀硕士生和博士生。2010-2019年,共有50名分别来自电子系、计算机系、自动化系、微纳电子系和软件学院的优秀硕士生和博士生获得此项奖励。

术交流

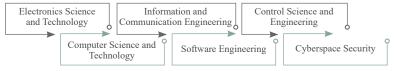
清华信息大讲堂

清华信息大讲堂以支持信息学院教师邀请国内外知名学者和专家来校做学术报告的 形式进行,自 2005 年启动以来,陆续受到了都科摩、诺基亚、IBM、日立、Intel、波音、 NEC、三星公司等多家知名外企的捐赠。2010-2019 年,共举办学术报告 141 讲。

Statistics of the Disciplinary Cluster of Information Science

Disciplinary Construction

First-level Disciplines



Faculty

By the end of 2019, there were 455 teachers in the SIST, 140 of whom had been selected into various national talent programs.

Faculty Composition



Outstanding Talents

Academicians of the Chinese Academy of Sciences	6
Academicians of the Chinese Academy of Engineering	7
Distinguished Professors of the Yangtze River Scholars Program	17
Winners of National Science Fund for Distinguished Young Scholars	41
Young and Middle-aged Leaders in Scientific and Technological Innovation	10
Young Scholars of the Yangtze River Scholars Program	11
Winners of Outstanding Youth Science Foundation	40
Outstanding Young Talents	8

Research

National Science and Technology Award

From 2010 to 2019, the SIST won a total of 40 national science and technology awards (30 completed as the first unit and 10 as the participating unit), including 9 national natural science awards, 15 national technological invention awards and 16 national science and technology progress awards.





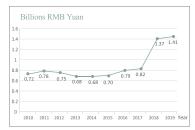


From 2010 to 2019, the SIST won three first-class national science and technology awards as the first contributing unit.

Papers/Books/Patents

Year	Papers			Books	Patents	
	Total	SCI	EI	BOOKS	Filled	Granted
2009	2487	459	869	23	371	248
2010	2459	451	761	18	528	255
2011	2113	501	774	18	560	309
2012	2000	523	585	24	545	426
2013	2158	680	847	27	647	380
2014	2136	689	667	21	565	317
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2016	1546	735	882	15	522	477
2017	2054	744	687	22	761	511
2018	2102	662	N/A	17	745	520
Total	21197	6083	6886	208	5741	3814

Research Funding



Work of the SIST

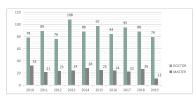
Student Training

Course Introduction

At present, the SIST offers three major types of undergraduate courses, namely, electronic information, computer and automation. Electronic information courses cover professional fields such as information photoelectron, communication, microwave, information cognition, microelectronics and electronic circuits, information systems and biomedical engineering. Computer courses cover directions such as high-performance computing, network technology, software engineering, human-computer interaction and media, intelligent technology and systems, network space security, information management, theoretical computer science, quantum computing, and brain like computing. Automation courses are based on a wide-caliber basic curriculum system, with mathematics, information theory, control theory, system theory and other knowledge as the core, aiming at training compound innovative talents with equal training on engineering, information technology and management skills.

Fund for Postgraduate Students to Attend International Conferences

In order to support the students of the SIST to go abroad to participate in high-level international academic conferences, to promote direct communication between students and top international scholars, and to understand the latest developments and trends in their research fields, in 2004, Mr. Deng Feng, an alumnus of Tsinghua, donated money to set up the fund for postgraduate students of the SIST to attend international conferences. The Fund was renamed as the "Deng Feng Fund" in 2010. During the development, the fund has successively received donations from Mr. Deng Feng, Tsinghua University, Nomura Research Institute of Japan, Wuxi Ru'an Technology Co., Ltd. and Mr. Zhao Shiqin. From 2010 to 2019, 1,118 postgraduates were supported by the fund, who had presence over 40 countries and regions.



Number of Doctoral and Master's Students Funded from 2010 to 2019

Fund for Students to Attend Highlevel International Competitions

To further strengthen the training of international talents in the SIST and enhance students' academic performance and innovation ability, the SIST has expanded the support scope of the "Deng Feng Fund" since September 2017, adding high-level international competition programs to support students of the school to participate in high-level international competitions. By the end of 2019, nine student competitions had been funded, and all the funded teams had achieved excellent results in these competitions.

Students Exchange Program

To cultivate students' international vision and improve their international communication and research innovation ability, in 2006, Mr. Deng Feng, an alumnus of both Tsinghua University and the University of Southern California, donated and set up a special fund to support the THU-USC Undergraduate Summer Exchange Program. From 2010 to 2019, 140 students participated in the exchange program.





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Scholarship

To support Tsinghua University's education, encourage students to study hard and train more outstanding talents, Intel Corporation has funded the establishment of the "Tsinghua-Intel Scholarship" in Tsinghua University, which specifically rewards outstanding master's and doctoral students of the SIST with independent working ability, research ability and innovative spirit in the field of information science and engineering technology. From 2010 to 2019, a total of 50 outstanding master's and doctoral students from the Department of Electronic Engineering, Department of Computer Science and Technology, Department of Automation, Department of Microelectronics and Nanoelectronics, and School of Software respectively won the scholarship.

Academic Exchange

Tsinghua Information Forum

The Tsinghua Information Forum is held in the form of supporting teachers of the SIST to invite renowned scholars and experts from home and abroad to deliver academic reports. Since its launch in 2005, it has received donations from several well-known foreign companies such as NTT DOCOMO, Nokia, IBM, Hitachi, Intel, Boeing, NEC and Samsung. From 2010 to 2019, 141 lectures on academic reports were rendered.