

Programs at SICE

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SICE History

- **2000**, School of Informatics
- **2005**, School of Informatics
(CS joined the school)
- **2009**, School of Informatics and Computing
- **2013**, School of Informatics and Computing
(SLIS joined the school)
- **2015**, Intelligent Systems Engineering Department and Program were approved
- **2017**, School of Informatics, Computing, and Engineering
- SICE Population (2018): 3100 (Total), 1962 (Undergraduate), 772 (MSc), 329 (PhD)

SICE Structure

- Department of Computer Science
- Department of Informatics
- Department of Information and Library Science
(graduate program)
- Department of Intelligent Systems Engineering
- Data Science Program
(graduate program)

- Undergraduate Degrees
 - Bachelor of Science in Computer Science: 538 students
(Specializations: AI, PL, Systems, Foundations, Security, Data Science, Software Engineering, Game Development)
 - Bachelor of Arts in Computer Science
(Administered by the College of Arts and Science)
 - Accelerated Master's Program in Computer Science
 - Minor in Computer Science
 - Minor in Information Technology

- Graduate Degrees
 - M.S. in Computer Science
 - M.S. in Bioinformatics
 - M.S. in Secure Computing
 - Dual Degree in Secure Computing and the Russian and East European Studies
 - M.S. in Cybersecurity Risk Management (jointly with Maurer and Kelley)
 - Ph.D. in Computer Science
 - Ph.D. in Cognitive Science and Computer Science
(A dual major in cognitive science and computer science)
 - Ph.D. Minor in Computer Science

- Undergraduate Degrees
 - Bachelor of Science in Informatics: 1577 students
(2nd largest major on campus!)
(Cognates in 30+ areas)
 - BSc Informatics → MSIS (Kelley School of Business)
 - BSc Informatics → MIS (ILS)
 - Certificate in Informatics
 - Minor in Human-Centered Computing
 - Minor in Informatics
 - Minor in Security Informatics

- Graduate Degrees

- M.S. in Informatics

- (Complex systems, proactive health informatics, human-computer interaction design, music informatics, intelligent and interactive systems, computing, culture and society, and virtual heritage)

- M.S. in Human-Computer Interaction Design

- Ph.D. in Informatics

- (Multiple tracks)

- Ph.D. Minors in Informatics

- (Bioinformatics, complex networks and systems, data science, human-computer interaction, informatics, music informatics, security informatics, and social informatics)

Information and Library Science

- Master of Information Science (M.I.S.)
- Accelerated Master's Program in Information Science (B.S. or B.A. and a Master of Information Science)
- Master of Library Science (M.L.S.)
- Accelerated Master's Program in Library Science (B.S. or B.A. and a Master of Library Science)
- Ph.D. in Information Science
- Ph.D. minors: ILS, Information Science
- Graduate Certificate in Information Architecture

- Undergraduate Degrees
 - Bachelor of Science in Intelligent Systems Engineering: 89 students (Concentrations: Computer Engineering/Cyber-physical Systems, Bioengineering, Molecular Nanoscale Engineering)
 - Accelerated Master of Science in Intelligent Systems Engineering

- Graduate Degrees
 - Master of Science in Intelligent Systems Engineering
 - PhD in Intelligent Systems Engineering
(Tracks : Bioengineering, Computer Engineering, Cyber-physical Systems, Environmental Engineering, Molecular and Nanoscale Engineering, Neuroengineering)

- Data Science GR CRT
- Data Science MS
- Data Science MS Online

Ranked List by Enrollment

- Data Science Online, 294
- Data Science MS, 145
- Computer Science PhD, 136
- Computer Science MS, 126
- Informatics PHD, 110
- Library Science MLS, 89
- Human Comp Interaction MS, 85
- Intelligent Systems Engineering PhD, 69
- Information Science MIS, 36
- Data Science GR CRT, 34
- Information Science PHD, 25
- Computer Sci-BS/MS, 20
- Intelligent Systems Engineering MS, 11
- Cybersecurity GR CRT, 7
- Secure Computing MS, 6
- Informatics MS, 5
- Information Architecture GR CRT, 1
- Bioinformatics MS, 0

A Peek at the Pipeline

- BSc in Data Science
- BSc in Cybersecurity and Global Policy (SICE + HLS partnership)
- BSc in User Experience Design (SICE + SoAAD)
- A graduate program in AI
- Experiential learning in Silicon Valley

International Experience

- Long-term plans (Exchange Programs):
 - ① Sungkyunkwan University (SKKU), Department of Library and Information Science/Data Science
 - ② Sungkyunkwan University (SKKU), CICE and CS
 - ③ Dual degree in Computer Science (Fudan University/SICE CS) (under progress)
 - ④ University of Edinburgh, School of Informatics (under progress)

- Short-term plans
 - ① IT in Emerging Markets-India , Fall 2016
New Delhi + Pune, December 27, 2016-January 7, 2017.
Repeated in 2018, and planned for 2019.
Special focus: Digital India Program
 - ② Other offerings with India and different foci
- International Serve/Teach-IT (Belize: 2015, 2018)

Innovation and Entrepreneurship at SICE

- Cheng Wu innovation challenge
- The Cross-Campus Certificate in Entrepreneurship (SICE + Kelley partnership)
- Shoemaker Innovation Center
- Vibrant ecosystem of student organizations, currently 15

CS Research Areas

- Formal methods for system design, hardware, and robotics
- Foundations: Theory of computing, algorithms, and applied logic
- High-performance computing
- Cybersecurity
- Graphics and visualization
- Programming languages and compilers
- Artificial intelligence and cognitive science
- Distributed and parallel systems
- Database and information systems
- Computer networks and security
- Security informatics
- Bioinformatics

INFO Research Areas

- Complex networks and systems
- Health informatics
- Human-computer interaction design
- Intelligent and interactive systems
- Music informatics
- Social informatics

ISE Research Areas

- Bioengineering
- Computer Engineering
- Cyber-physical Systems
- Environmental Engineering
- Molecular and Nanoscale Engineering
- Neuroengineering

Research Centers

- Center for Applied Cybersecurity Research, 5 affiliated faculty
- Center for Bioinformatics Research, 6 affiliated faculty
- Center for Complex Networks and Systems Research, 13 affiliated faculty
- Center for Data and Search Informatics, 10 affiliated faculty
- Center for Research in Extreme Scale Technologies, 5 affiliated faculty
- Center for Research On Mediated Interaction (CROMI)
- Center for Security Informatics, 7 affiliated faculty

- Cyberinfrastructure for Network Science (CNS) Center, 1 affiliated faculty
- Data to Insight Center, 1 affiliated faculty
- Digital Science Center, 3 affiliated faculty
- Indiana University Network Science Institute, 3 affiliated faculty
- Rob Kling Center for Social Informatics, 8 affiliated faculty
- Web Science Center

Thank You!

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