



The First Ph.D. Program on Service Science

The Institute of Service Science (ISS) at National Tsing-Hua University (NTHU)

The Institute of Service Science is the first graduate program established in Taiwan in 2008 with the following elements of vision:

- Integrating domain knowledge in science, technology, management, and design to develop the service science discipline
- Nourishing students to become professionals in service innovation in order to improve the wellbeing of human society and raise national competitiveness
- Cooperating with industries to boost the service economy
- Contributing to domestic and international academic communities with research outputs

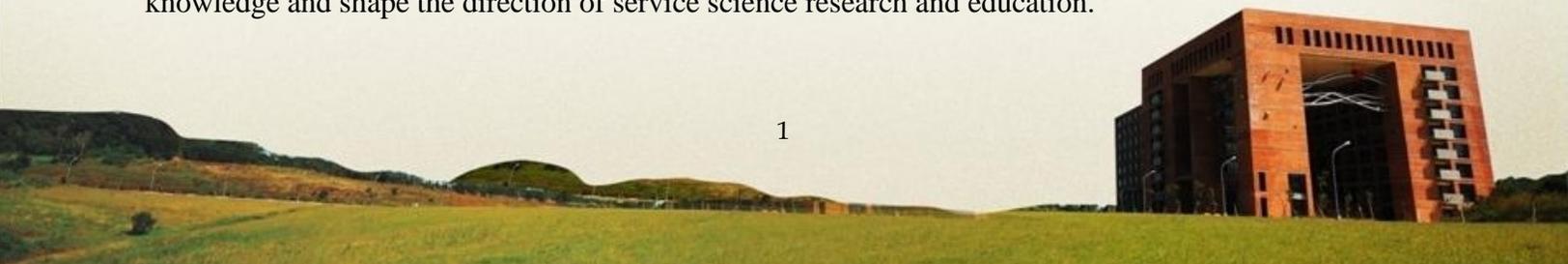
Since 2008, the institute has adopted unique educational practices to embed humanity into the learning environment, to involve industries into the educational context, and to generate domain relevant research outputs with theoretical methodologies. For example, the masters curriculum is composed of three categories: service management and innovation, service information system and management, and service culture and society to bring learning subjects for students to integrate knowledge from various perspectives and to enhance problem solving capabilities using managerial and technical approaches. In their first year, students spend two months of their summer as interns to experience a corporate context and apply their knowledge to service related tasks. The summer internship allows students to identify their strengths and weakness in order to plan their second year's learning activities and finish their thesis work. Students also go through a humanity camp in the first winter break, in which they participate in a series of team activities. The humanity camp lets them experience the power of change and helps them become confident in fulfilling their life destinies by serving people.

The institute has built strong collaborative ties with major research institutes and industries in Taiwan:

- Research institutes: Institute of Information Industry (III), Industrial Technology Research Institute (ITRI), Commerce Development Research Institute (CDRI)
- Companies in various industries: IBM, Delta, Chunghua Telecom, Telexpress, MOS burger, Asus, Yahoo, Scenario Lab, Microsoft, Lion travel, Amadues, Lavender Cottage, and others.

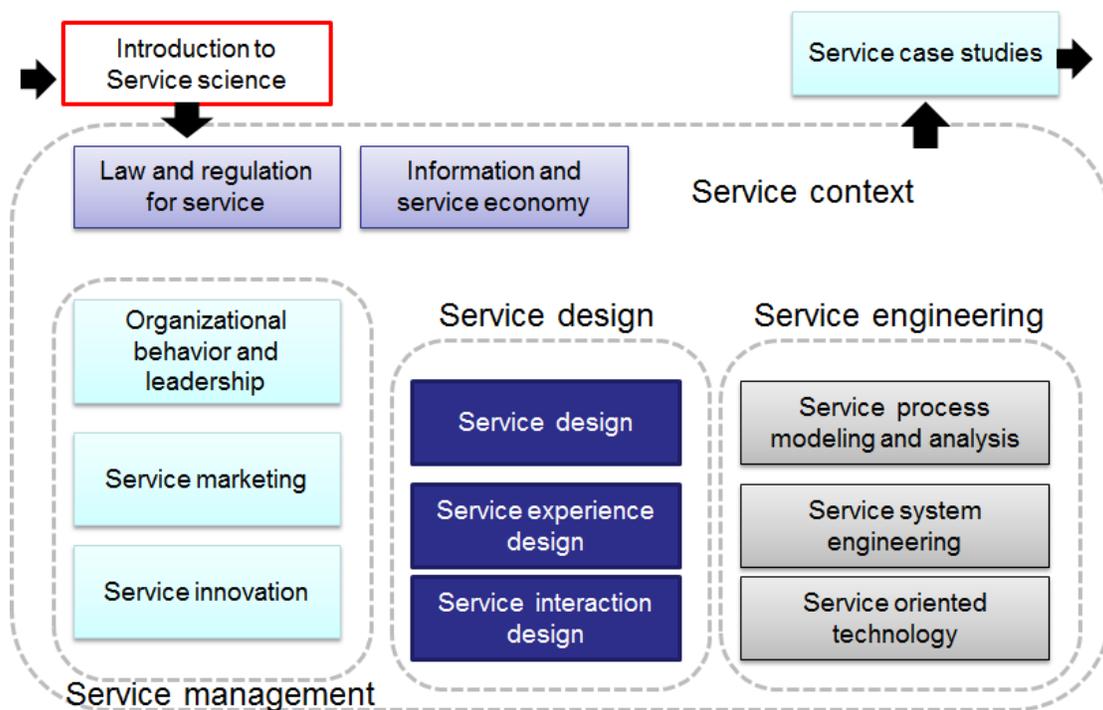
By interacting with industries, our faculty and students are able to gather the emergent needs of industries, conduct domain relevant research, and learn up-to-date knowledge and skills.

The institute also actively contributes to the academic and industrial activities to grow a service science professional community based on the Service Science Society of Taiwan (s3tw). The society was established in 2011 to connect professionals from various disciplines in academia and industry to make contributions to the service economy and to social wellbeing. Together, these professional undertake academic research, education, and industrial cooperation. The Institute also initiated the annual International Conference on Service Science and Innovation (ICSSI) in 2009. The conference has become a platform for scholars and practitioners from constituent domains to exchange up-to-date knowledge and shape the direction of service science research and education.



◆ Ph.D. Curriculum

The Ph.D. program in ISS aims to cultivate high-level researchers who will tackle important issues in service phenomena and develop the service science discipline. Besides finishing a dissertation, Ph.D. students need to finish 24 credits of courses in order to obtain the Ph.D. degree. All students are required to take the following courses which account for 12 credits: Theories for Service Science, Quantitative Research Methods, Qualitative Research Methods, and Special Topics in Service Science. Students can take the courses from Service Management, Design, and Engineering to fulfill the additional 12 needed credits. The figure below shows the structure of inter-disciplinary core courses for service science. Students will go abroad at least half a year to experience another research environment and grow the joint research capabilities via international collaboration.



The interdisciplinary curriculum for service science

◆ The PhD Roadmap at ISS

The PhD program at ISS is a four to five year program that will train students to be world-class service researchers. At the end of the program, students will be qualified to be both tenure-track researchers in top-tier academic institutions or senior researchers in world-class organizations in industry. The Ph.D. program will help students invest their time and effort in gaining the experiences needed for both directions.

- *Start the Publication Pipeline:* Faculty will guide students through the process of publishing in leading academic journals. Before graduation, students are expected to publish in domain recognized international journals, as well as present in major international conferences. The journal and conference publications will demonstrate students' future research potential and make them strong candidates for tenure-track positions in world-class universities.



- *Experience At Least a Semester Abroad:* Each student will spend time in a top-tier university outside of Taiwan. During their time abroad, students will deepen core knowledge, and apply their research skills in a collaborative project. The semester abroad will demonstrate students' ability to work alongside international researchers.

- *Take the Lead in an Industry Project:* Students have opportunities to take the lead role in joint industry-university projects. Their involvement in projects will include designing, engineering, or managing innovative new services in cutting-edge firms. The industry projects will strengthen students' ability to liaise with executives in organizations and manage a team of junior researchers.

- *Gain Language Skills:* The University offers practical training for foreigners to read and write in Chinese. With Chinese language ability, students will enter their career being able to interact with high-tech industries and governments in the fastest growing economic region of the world. Students' multilingual abilities will boost their professional standing, with both academia and industry now turning their attention to the greater China region.

- *Attend High Quality Classes:* Students can avail themselves of classes covering cutting-edge topics offered through the institute as well as other departments such as computer science, information systems and applications, technology management, law of science and technology, and more. Students can also gain credits for attending classes at other leading Taiwanese universities.

- *Attend Service Workshops and Camps:* Students will have the chance to attend workshops to gain the latest service design and engineering techniques. Students can join retreats in natural settings where we foster a humanistic perspective and develop innovative thinking. These opportunities will improve students' ability to connect with clients and serve others throughout their life.

◆ Financial and Living Support

The institute will provide full funding support in the first three years of doctoral study, and continue financial support based on research grants, in order to cover students' major expenses.

◆ The Value of a PhD from ISS

Tomorrow's business researchers must understand the rising complexity of modern services and leverage rapidly emerging innovations in science and engineering. Being able to conduct research through the lens of a service-dominant (S-D) logic will give students a unified perspective of today's complex environment. PhD students from ISS can push the boundaries of research in the new field of service science or apply the service perspective to conduct innovative research in other established fields.

"Creating research-driven service innovation capabilities is an overdue priority for nations and businesses."

— James Spohrer and Paul Maglio, 2010. "Toward a Science of Service Systems" in
Service Science: Research and Innovations in the Service Economy

"The S-D Logic and Service Science worldviews are forming at a time when the world is coming to grips with a number of mega-trends and potentially disruptive forces"

— James Spohrer, Laura Anderson, Norm Pass, Tryg Ager, 2008.
Service Science and Service-Dominant Logic

"Thus, we suggest that 'service,' or more precisely the service-for-service foundation, of S-D logic provides a common lens for viewing and perhaps linking a host of theories and logics. Importantly, we do not claim that S-D logic is a theory itself but, rather, as indicated, a logic, perhaps one that can unite other logics and form the foundation and lexicon for a unified theory."

— Stephen Vargo and Robert Lusch. "Why 'Service'?"
Journal of the Academy of Marketing Science, 2000.



Today’s leading organizations emphasize their need for interdisciplinary innovation. A PhD in service science allows students to deepen their existing expertise and while gaining know-how that lets the work with creative minds from other disciplines.

“You need some deep skill in today’s global world, but whatever you’re deep in, you need to balance it. If you’re deep in math and science or engineering, you’ve got to balance it with the humanities because you have to work in these multicultural global environments.”

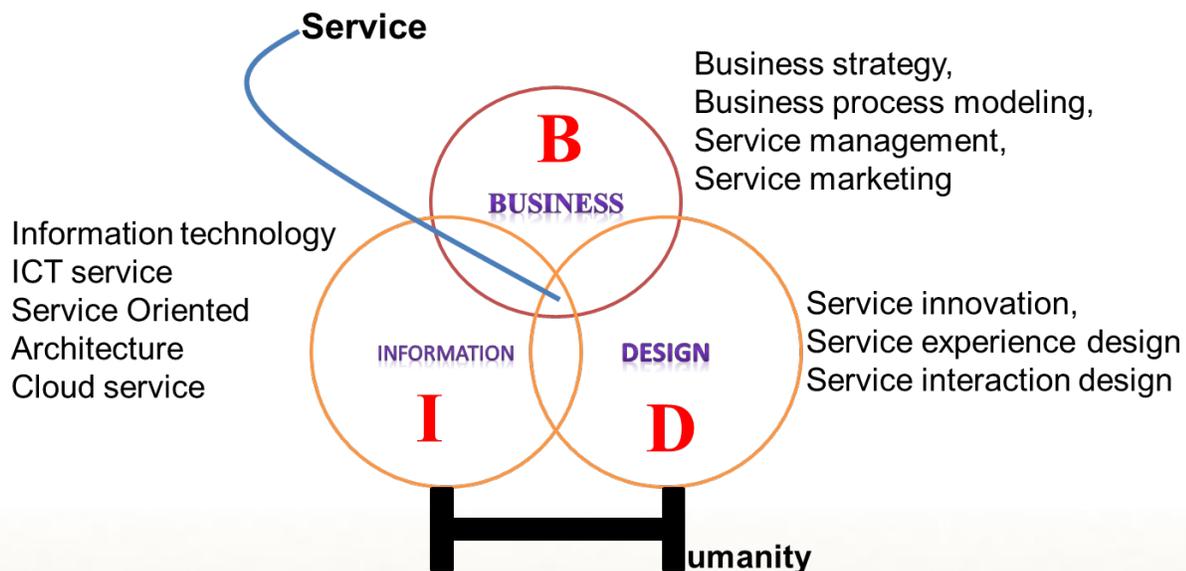
— Sam Palmisano, Former President and CEO of IBM

“The increasing complexity of products, services, and experiences has replaced the myth of the lone creative genius with the reality of the enthusiastic interdisciplinary collaborator.”

— Tim Brown, CEO of design and innovation consultancy IDEO

The rigorous PhD training at ISS will equip students to work at the cross-section of different disciplines, armed with the ability to critically analyze complex systems, and equipped with working knowledge of the latest emerging technologies. Students from ISS will be able to explore new areas of research on service systems, while also being able to create and manage innovative new services. Our integrative research, classes, and projects allow students to develop themselves in several areas:

1. Developing information systems that deliver and support modern services
2. Modeling, managing and marketing services
3. Designing innovative service experiences
4. Imbuing services with a sense of humanity



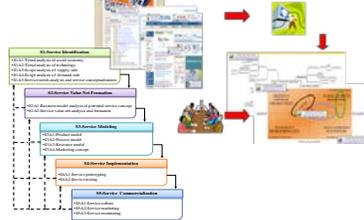
Meet Our Faculty

We have gathered excellent faculty who come from leading universities and represent the wide-range of expertise needed for holistic training in service science.

**Professor and Chairman
Fu-Ren Lin**



- ✓ E-commerce
- ✓ Data/text mining
- ✓ Knowledge management
- ✓ Service science



**Professor
HsiuJu Rebecca Yen**



- ✓ Services Marketing
- ✓ Internet Marketing
- ✓ e-Service and Innovation
- ✓ Customer Relationship Management



**Professor
Jyun-Cheng Wang**



- ✓ Social Network
- ✓ Community & EC
- ✓ Patent Analysis



**Assistant Professor
Pei-Fang Hsu**



- ✓ Implementation and Value Evaluation of Information Systems
- ✓ e-Business
- ✓ Wireless Telecommunication



**Assistant Professor
Soumya Ray**



- ✓ Online Behavior
- ✓ Switching Costs
- ✓ Online Security
- ✓ Online Communities



**Assistant Professor
Chen-Ya Wang**



- ✓ Service encounters;
- ✓ Cross-cultural services marketing;
- Service recovery



◆ About National Tsing Hua University (NTHU)

Profile of National Tsing Hua University



NTHU is consistently ranked as one of Taiwan's premiere universities, and is widely recognized as the best incubator for future leaders in industries as well as academics. NTHU was first established in Tsing Hua Garden in Beijing in 1911 as Tsing Hua Academy. In 1956, National Tsing Hua University was reinstalled on its current campus in Hsinchu, Taiwan. Since its reinstallation, NTHU has developed from an institute focusing on nuclear science and technology to that of a comprehensive research university offering degree programs ranging from baccalaureate to doctorate in science, technology, engineering, humanities and social sciences, as well as technology management.

Why National Tsing Hua University?

- The best research university in Taiwan
- 17 research centers with emphasis on science, engineering and technology management
- Notable Alumni: 3 Nobel laureates, one Wolf Prize Winner and more than 400 high-level managers; 12 were selected Academician of Academia Sinica
- The highest proportion of faculty winning national academic awards in Taiwan
- The highest average citation of faculty publications among Taiwanese universities
- Consistently ranked “Excellent” in the Ministry of Education's “Toward World-class University Project”

◆ Living in Hsinchu

Hsinchu is considered as the oldest city in northern Taiwan with beautiful mountain and coastal scenery, and where the National Tsing Hua University is located. Today the city is renowned as a science city, high-tech hub, and Silicon Valley of Taiwan. One cannot talk about Taiwan's achievements in semiconductor device fabrication, electronics, laptops, etc. without knowing about Hsinchu since it is the home of Taiwan's high-tech companies and premiere research institutes. Hsinchu County is located in northwestern Taiwan. It's about an hour drive to Taipei, the capital city of Taiwan. Hsinchu is often nicknamed “The Windy City” of Taiwan.



◆ Contact Information

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