

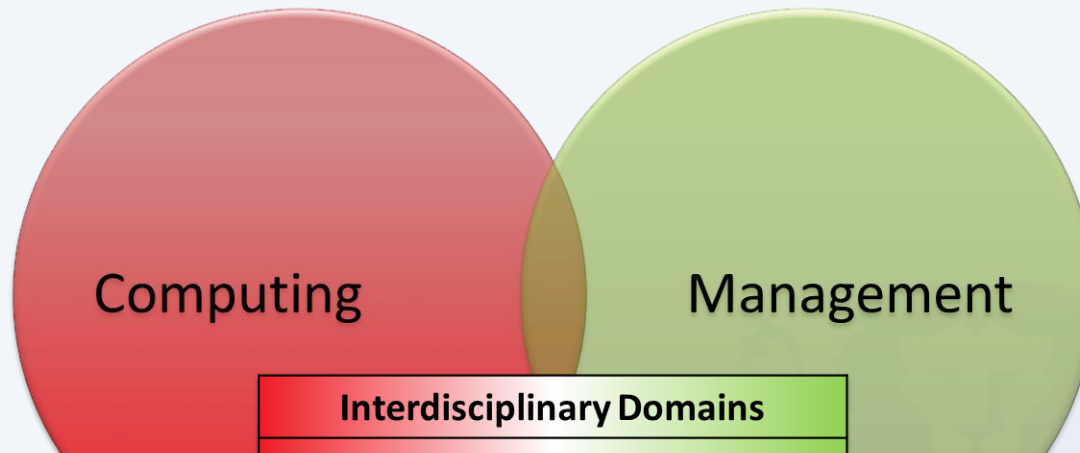
Information Systems Industry Capstone Project (ICaP)

Information for Industry Partners

August 2020
(AY2020/21 Semester 1)

About the B.Comp. IS Programme

A four years **interdisciplinary** programme encompassing the best of **computing** and **management**.



Computing Domains
Computing Fundamentals
Full-stack Software Engineering
Data Engineering
Internet of Things
User eXperience & Mixed Reality

Interdisciplinary Domains
Enterprise IT Solutions Designing
IT Consulting
Digital Innovation
Smart Nation
Technopreneurship

Management Domains
Electronic Commerce
Financial Technology
Customer Relationship Mgt.
Social Media & Digital Marketing
Information Security Mgt.

About the IS Capstone Project

A multifaceted project that serves as a culminating academic and intellectual experience for IS students.

Level 4000 100% project-based learning module with double workload, i.e., 8 module credits.

Typically read by students in their 3rd and 4th year of studies before their internship.

Students work (in groups) through a complete Systems Development Life Cycle to develop a large-scale and complex business software application.

About the ICaP Initiative

ICaP was first launched in the August 2019 semester with 30 projects from 14 private and public organisations.

The objectives of ICaP are two-fold:

Expose our students to challenging real-world business problems.

Support Singapore's digital transformation endeavour.

Industry partners gain insights into the strengths and capabilities of our students, and access to a pathway to engage them in future internship and full-time employment.

Key Differences between ICaP and Internship

	ICaP	Internship
Supervision Mode	Joint supervision between University and host organisation	Sole or majority supervision by host organisation
Overarching Goal	A balance between University's academic requirements and host organisation's business requirements	Host organisation's business requirements
Duration	3 months	3 months or 6 months
Number of Students	4 to 8	1 or 2
Project Size	Moderate to Large	Small to Moderate
Stipend/Allowance	No, optional	Yes, compulsory
Module Credits	8 MC	6 MC or 12 MC
Letter Graded	Yes	Depend on programme

Project Nature

The IS capstone project is primarily of a **software engineering** nature.

Characteristics of a typical **business software application**:

One or more frontend software applications with a common backend

The frontend can include a mixture of desktop, web and mobile applications.

The backend can involve component-based architecture, service-oriented architecture or microservices architecture.

Project Nature (cont.)

The overall system typically adopts a multitier architecture.

Our students can also confidently handle common business information technology **hardware** beyond mobile devices.

Generic system domains include digital commerce, CRM, ERP, HRMS, AMS, CMS, etc.

Specific/custom system domains catering to the needs of our industry partners.

Our students can also handle **data analytics** and **data engineering** requirements (e.g., embedded analytics).

Project Nature (cont.)

DevOps and **software quality assurance** may be scoped in as part of the project workload.



Project Timeline and Milestones

ICaP is divided into three phases, stretches across six months, and consists of twelve milestones.



Sample Projects Done by Students

For the August 2019 semester, out of 30 projects proposed, 8 projects ($\approx 30\%$) were successfully awarded to students.

The domains of these 8 projects vary, and reflect the versatility of our students' capabilities.

The company name and sensitive information have been removed.



Sample Projects Done by Students (cont.)

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Sample Projects Done by Students (cont.)

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Sample Projects Done by Students (cont.)

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Sample Projects Done by Students (cont.)

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Frequently Asked Questions (FAQs)

What are the commitments from my organisation?

What are the resources that my organisation needs to provide the students?

How would the ongoing COVID-19 public health situation affects ICaP this semester?

My organisation is a government agency. Can we restrict our project to Singaporean students only?

What would happen to the intellectual property of the students' deliverables?

Questions & Answers

You can also contact the IS capstone project coordinator Dr. Tan Wee Kek via email tanwk@comp.nus.edu.sg or call 6516 6731 during office hours.

Thank You

