



Department of Information Systems and Analytics  
School of Computing

# Freshman Briefing 2024

*for* Information Systems and Business Analytics Students



# Agenda

1. Welcome Speech
2. Where are you heading? See where your seniors are
3. How can I prepare? Remember the key milestones
4. Overview of a Degree Programme
5. Bachelor of Computing (Information Systems)
6. Bachelor of Science (Business Analytics)
7. Internship and Undergraduate Research Programmes
8. Entrepreneurship and Work/Service Opportunities
9. Student Experience Sharing
10. Q&A

# Welcome Speech

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## Department of Information Systems and Analytics School of Computing



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# Where are you heading?

## See where your seniors are!



# Difference Across **IS**, CS and **BZA** Degrees



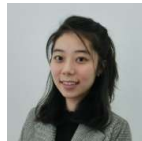
IS and BZA graduates play a key role in the **digital transformation** of organisations

	Information Systems (IS)	Computer Science (CS)	Business Analytics (BZA)
Focus	IT solutioning	Technical, algorithmic	Industry-relevant data analysis
Objective	More efficient/effective IT-enabled <b>business</b>	Reliable, efficient software	Evidence-based decision making in <b>business</b>
Core task	Design and implement IT solution by determining <b>business requirements</b> and understanding existing/new IT infrastructure and portfolio	Deliver software systems to meet defined requirements and specifications	Deliver data-driven and model-based insights and recommendations to address <b>business problems</b>

# Recent IS Graduates



Co-Founder & CTO  
**Hubble.Build**



Solutions Engineer  
**TikTok**



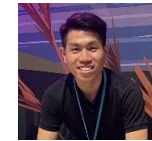
Software Engineer  
**Barclays**



DevOps Engineer  
**Dynamite Games**



Software Developer  
**Citi**



Cloud Architect  
**AWS**



Senior Product Manager  
**Shopee**



Consultant  
**IBM**



Analyst  
**GIC**



Product Manager  
**HP**



Software Engineer  
**Shopee**



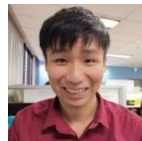
Software Engineer  
**PayPal**



Senior Consultant  
**Deloitte**



Business Engineer  
**Meta**



DevOps Engineer  
**GovTech**



Software Engineer  
**JPMorgan Chase**



Senior Analyst  
**Accenture**



Technology Analyst  
**Goldman Sachs**

# Recent BZA Graduates



Quant Analyst  
**Bloomberg**



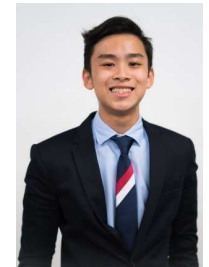
Data Scientist  
**TikTok**



Data Engineer  
**GIC**



Analyst  
**Capula Investment  
Management**



Software Engineer  
**Visa**



Associate AI Engineer  
**GovTech**



Software Engineer  
**Singapore Airlines**



Software Engineer  
**JPMorgan Chase**



Data Scientist  
**OCBC**



Software Engineer  
**DBS**

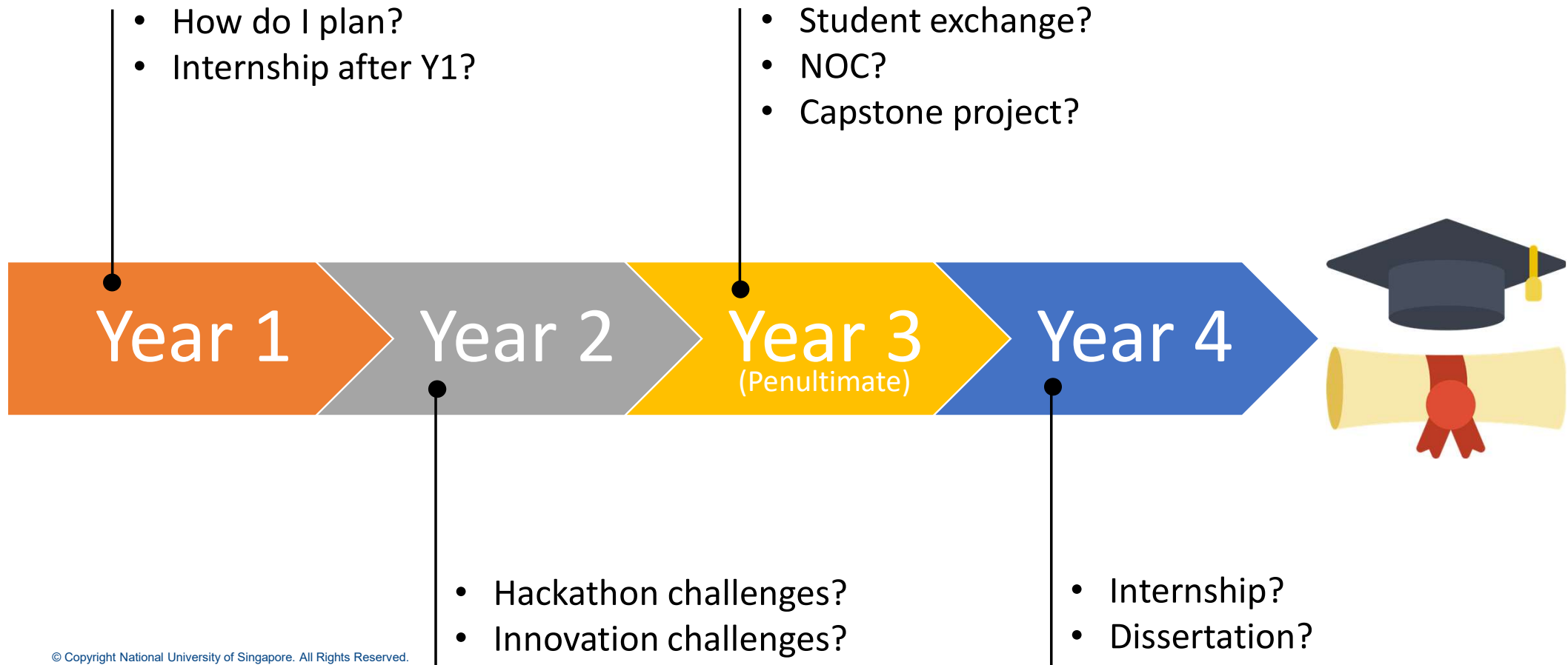


# How can I prepare?

Remember these key milestones



# Milestones



# Some Advice

## Step 1: Course planning

- Based on individual aspiration, particularly for programme electives and unrestricted electives

## Step 2: CV review

- Domain and professional positioning

## Step 3: Interview preparation

- Internship and job interview

## Step 4: Technical test preparation

LinkedIn



### Advice:

1. Build your [LinkedIn profile](#) from day 1
2. Explore opportunities and discover your interest – attend more [industry talks](#)



# Overview of a degree programme



# Curriculum Structure

- For **single degree**, **160** units
- For **double degree**, minimum 160 units, up to **200** units (approximately), satisfying both degree requirements
- For **poly-intake**, **20** units is automatically awarded for unrestricted electives
  - up to **20** units to fulfil

Modules	Units	Subtotals
<b>COMMON CURRICULUM REQUIREMENTS</b>		<b>40</b>
<b>PROGRAMME REQUIREMENTS</b>		<b>80</b>
<b>Core Courses</b>	<b>60</b>	
<b>(including 12 units of Dissertation or Industry Experience Requirement)</b>		
<b>Elective Courses</b>	<b>20</b>	
<b>UNRESTRICTED ELECTIVES</b>		<b>40</b>
<b>Grand Total</b>		<b>160</b>

# Curriculum Structure

Modules	Units	Subtotals
<b>COMMON CURRICULUM REQUIREMENTS</b>		<b>40</b>
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Core Courses	60	
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Elective Courses	20	
<b>UNRESTRICTED ELECTIVES</b>		<b>40</b>
<b>Grand Total</b>		<b>160</b>

- Read **1** General Education (GE) Courses from **each of the 6 pillars**
- Students are strongly encouraged to complete all GE courses within the **first two years** of their candidature
- Two programme requirements are used to satisfy two pillar requirements (CS1010A/S/J fulfills Digital Literacy and BT1101 fulfills Data Literacy)
- Read IS1108 Digital Ethics and Data Privacy





# Communities and Engagement

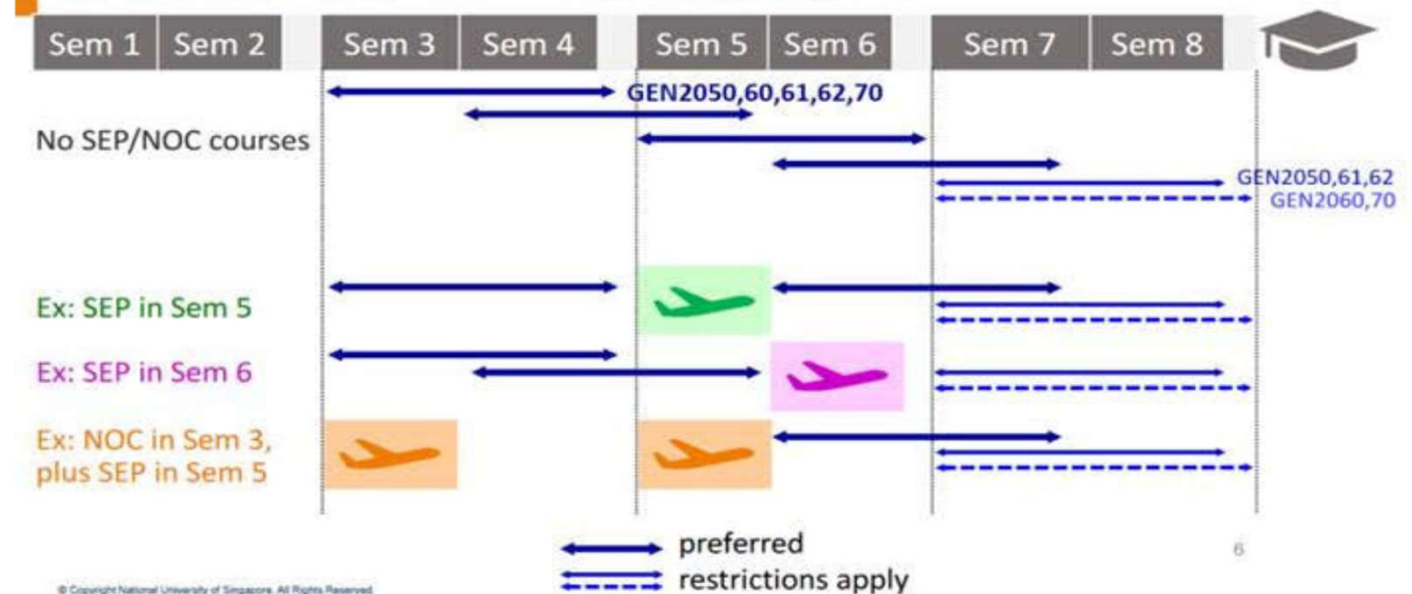
- **Communities and Engagement (coded as GEN%)**
- One of the **Pillars** under **Common Curriculum**
- GEN courses may be Semester or Year long (see below)
  - <https://www.nus.edu.sg/registrar/academic-information-policies/undergraduate-students/general-education/communities-and-engagement-pillar>

# Communities and Engagement

Issues: semester-long GEN courses have limited capacity per semester – alternative is year-long GEN Courses (i.e. Service Learning)

Students planning for enrichment programmes (Student Exchange Programme (SEP), NOC and/or internships) who wish to take year-long GEN option – recommend not leaving the GEN course too late and recommend to include Servicing Learning in their Study Plan.

## Include Service Learning in Study Plan







# Interdisciplinary (ID) and Cross-disciplinary (CD) Courses

- Under the common curriculum requirements, students are required to take 12 units with at least two ID courses and no more than one CD course.
- BZA and IS students are advised to choose your two ID courses from:
  - IS1128 IT, Management and Organisation
  - IS2218 Digital Platforms for Business
  - IS2238 Economics of IT and AI

# Curriculum Structure

Modules	Units	Subtotals
COMMON CURRICULUM REQUIREMENTS		40
PROGRAMME REQUIREMENTS		80
<b>Core Courses</b>	<b>60</b>	
(including 12 units of Dissertation or Industry Experience Requirement)		
Elective Courses	20	
UNRESTRICTED ELECTIVES		40
<b>Grand Total</b>		<b>160</b>

- **Essential courses** that you must do
- For mathematics course requirement, there could be **2 options** for you to choose
- **Cross-faculty courses** (i.e., non CS/IS/BT-coded courses), please clear them as soon as possible
- **Pre-allocated core courses** (drop with care!)

# Curriculum Structure

Modules	Units	Subtotals
COMMON CURRICULUM REQUIREMENTS		40
PROGRAMME REQUIREMENTS		80
Core Courses	60	
(including 12 units of Dissertation or Industry Experience Requirement)		
Elective Courses	20	
UNRESTRICTED ELECTIVES		40
Grand Total		160

- Students with **GPA of 4.00 or higher** after completing **at least 70% (i.e. 112 units)** of the unit requirement for the degree programme **may opt** to replace the Industry Experience Requirement by **Dissertation (12 units)**.
- If you opt to do a dissertation (final year project, FYP), you **do not need** to take up internship.
- Students who aim for **Honours (Highest Distinction)** must pass the **Dissertation**.

# Curriculum Structure

Modules	Units	Subtotals
COMMON CURRICULUM REQUIREMENTS		40
PROGRAMME REQUIREMENTS		80
Core Courses	60	
(including 12 units of Dissertation or Industry Experience Requirement)		
Elective Courses	20	
UNRESTRICTED ELECTIVES		40
Grand Total		160

- Complete 5 programme elective (PE) courses
- For specialisation, there is a pre-defined set of courses to take (20 units)
  - choosing a specialisation is optional, though it helps in your career positioning
  - once fulfilled the specialisation requirement, it will be reflected on your transcript
  - double counting of common courses between specialisations should not be more than 8 units among specialisation(s)
- You have lots of elective courses to choose, so choose wisely

# Curriculum Structure

Modules	Units	Subtotals
COMMON CURRICULUM REQUIREMENTS		40
PROGRAMME REQUIREMENTS		80
Core Courses	60	
(including 12 units of Dissertation or Industry Experience Requirement)		
Elective Courses	20	
<b>UNRESTRICTED ELECTIVES</b>		<b>40</b>
<b>Grand Total</b>		<b>160</b>

- Poly-intake: reduce 20 units
- Doing a minor: 20 units (potentially up to 8 units double counted)
- Doing a second major: 40 units (potentially up to 16 units can be double counted)
- Suggestion: Choose more courses from the BT/IS elective course list.

They are specially created for you!

# Points to take note

- Read **at least 18 units** every semester throughout your candidature, except during the following semesters when you are allowed to read fewer units:
  - final semester before completion of all graduation requirements for the degree
  - semester in which you are doing industrial attachment or final year project
- You **cannot** overload more than **23 units** in the first semester; overloading in subsequent semesters based on GPA and requires approval.
- You are **not** allowed to opt for a **new Minor or Second Major** programme beyond the end of the **5th semester** of study. Do it early!



# Points to take note

- **Academic Integrity: Cheating, Plagiarism, Learning Materials Copyright, etc**
  - Proper use of Generative AI tools for learning
- Check both your NUS and Comp emails regularly (or do forwarding)
  - Please do not ignore email from [ohlb@nus.edu.sg](mailto:ohlb@nus.edu.sg)
- Find your study mate(s)
  - Many of the courses have group-based project and assignment
  - Capstone project is a team-based course
- Watch out for your GPA
  - to graduate, you need a minimum GPA of 2.00.
  - to continue in an undergraduate programme of study, a student may not have GPA below 2.00 for two consecutive semesters.

Honours Degree Classification	Criteria
Honours (Highest Distinction)	GPA 4.50 and above
Honours (Distinction)	GPA 4.00 – 4.49
Honours (Merit)	GPA 3.50 – 3.99
Honours	GPA 3.00 – 3.49
Pass	GPA 2.00 – 2.99

\*\* for any semester in which the student's GPA falls below 2.00, s/he will be placed on probation.

\*\* if the student's GPA remains below 2.00 for the second consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

# Points to take note (S/U Option)

- May exercise S/U option for up to **32 units** in **first two regular semesters and two special terms**; if this is not fully utilised, the S/U option may still be exercised in subsequent semesters, for up to **12 units**.
- **Poly intake**: may exercise S/U option for up to **20 units** in **first two regular semesters and two special terms**; if this is not fully utilised, the S/U option may still be exercised in subsequent semesters, for up to **12 units**.
- S/U option will apply to all Level 1000 courses (with or without pre-requisites) and Level 2000 courses without other NUS modules as pre-requisites, unless otherwise stipulated by the Faculties/Departments.
- S/U option: obtain either Satisfactory (S) or Unsatisfactory (U) record for the course
  - **not** included in the calculation of your performance
  - **3-day window** to decide on S/U after release of exam results
  - **irrevocable!**
- You must score a **minimum “D” grade to get “S”**. Otherwise your transcript will show **“U” (Unsatisfactory)** for the course. **“U”** also means that the course **cannot** be counted as satisfying a pre-requisite.





# More Advices on Course Planning

- You have some flexibility to deviate from suggested study plan
- Plan ahead and update study plan after each semester
- Be mindful of the pre-requisites
- Capstone project course/internship to be taken when you have sufficient confidence
- Always refer to the **Cohort 2024/25** curriculum webpage on SoC website for changes to degree requirements
- Use current AY's **Course Schedule** as a guide on course offerings, but note that the semester that a course will be offered *may* change in the following AY
  - Some core courses will only be offered in one semester
  - Some elective courses may not be offered every semester
- There may be a course quota for popular elective courses
  - Some elective courses may be offered in both semesters
- Have contingency plans, especially if aiming for a specialization, taking second major/minor or going for SEP

# Bachelor of Computing (Information Systems)



<https://www.comp.nus.edu.sg/cug/per-cohort/is/is-24-25/>

# Bachelor of Computing (Information Systems)

**Develop  
Expertise**

**Specialisation: Digital Product and Platform  
Management, Financial Technology,  
AI System Solutioning**

**Industry Capstone Project  
Internship (ATAP, NOC)  
Information Systems Dissertation**

IS4103, IS4010, CP3880, CP4101

**Develop  
Competency**

**Full-Stack development**

**Project Management**

**Professionalism and  
Communication**

IS2102, IS2103, IS3106

IS4301, IS4100

IS1108, IS2101, IS3103

**Foundation**

**Analytics + Statistics**

**Business**

**Computing**

**Math, Stats**

IS1128, IS2218, IS2238

**Computer Science**

MA1521, ST2334, BT1101

CS1010J, CS2030, CS2040

**General Education**

**Student Exchange**

**Second  
Major/Minor**

**Double  
Degree**

# Bachelor of Computing (Information Systems)

A-level intake

Year 1		Year 2		Year 3		Year 4	
S1	S2	S1	S2	S1	S2	S1	S2
<u>IS1108</u>	CS2030	IS2102	IS3106	IS4103 (Capstone, 8 Units)	Internship Or FYP (12 Units)	PE5	UE6
<u>CS1010J</u>	ST2334	IS2103	IS3103			UE2	UE7
MA1521	IS2101	BT2102	PE1	PE2		UE3	UE8
ULR/ID/CD	<u>BT1101</u>	CS2040	ULR/ID/CD	PE3		PE4	UE4
ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	UE1	UE5	UE10
20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	20 Units
TOTAL GRADUATION REQUIREMENTS = 160 Units							

# Bachelor of Computing (Information Systems)

Poly-level intake (with module exemptions)

Year 1		Year 2		Year 3		Year 4	
S1	S2	S1	S2	S1	S2	S1	S2
<u>IS1108</u>	CS2030	IS2102	IS3106	IS4103 (Capstone, 8 Units)	Internship Or FYP (12 Units)	PE5	
<u>CS1010J</u>	MA1312/ MA1521	IS2103	ST2334			UE2	
<u>MA1301</u> (UE1)	IS2101	BT2102	CS2040	PE2		UE3	
ULR/ID/CD	<u>BT1101</u>	IS3103	PE1	ULR/ID/CD	PE3	UE4	
ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	PE4	UE5	
20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	0 Units
TOTAL GRADUATION REQUIREMENTS = 160 Units - 20 Units from Unrestricted Electives							



# Bachelor of Computing (Information Systems)

## Programme Electives (PE)

- Choose **5 Information Systems PE courses** to make up 20 Units
- At least 3 courses must be at level-4000

## IS Areas:

- Digital Business
- Financial Technology
- IT Solutioning
- IT Business Innovation and Entrepreneurship
- IT Security and Legal Aspects

# Bachelor of Computing (Information Systems)

## A Sample of IS Programme Electives

### Digital Business

IS3150 Digital Media Marketing  
IS3240 Digital Platform Strategy and Architecture  
IS4151 AIoT Solutions Development  
IS4262 Digital Product Management

### Financial Technology

IS4226 Systematic Trading Strategies and Systems  
IS4228 Information Technologies in Financial Services  
IS4302 Blockchain and Distributed Ledger Technologies  
IS4303 IT-Mediated Financial Solutions and Platforms

### IT Business Innovation and Entrepreneurship

IS3251 Principles of Technology Entrepreneurship  
IS4241 Social Media Network Analysis  
IS4242 Intelligent Systems and Techniques  
IS4261 Designing AI-driven Business Innovations

### IT Security and Legal Aspects

CS2107 Introduction to Information Security  
IS4231 Information Security Management  
IS4233 Legal Aspects of Information Technology  
IS4238 Strategic Cybersecurity

### IT Solutioning

CS2105 Introduction to Computer Networks  
BT3017 Feature Engineering for Machine Learning  
CS3240 Interaction Design  
CS3243 Introduction to Artificial Intelligence  
IS3107 Data Engineering  
IS3221 ERP Systems with Analytics Solutions  
BT4014 Analytics Driven Design of Adaptive Systems  
IS4100 IT Project Management  
IS4234 Governance, Regulation, and Compliance Technology  
IS4236 Cloud Services and Infrastructure Management  
IS4243 Information Systems Consulting  
IS4246 Smart Systems and AI Governance  
IS4250 IT-enabled Healthcare Solutioning  
IS4301 Agile IT with DevOps



# Bachelor of Computing (Information Systems)

## Digital Product and Platform Management Specialisation

Pursue a career in designing and managing digital products and solutions

**Pass 20 units (5 courses) from the prescribed list:**

**IS3150 Digital Media Marketing**

**IS3240 Digital Platform Strategy and Architecture**

**IS4233 Legal Aspects of Information Technology**

**IS4234 Governance, Regulation, and Compliance Technology**

**IS4236 Cloud Services and Infrastructure Management**

**IS4241 Social Media Network Analysis**

**IS4243 Information Systems Consulting**

**IS4250 IT-enabled Healthcare Solutioning**

**IS4261 Designing AI-driven Business Innovations**

**IS4262 Digital Product Management**



# Bachelor of Computing (Information Systems)

## Financial Technology Specialisation

Pursue niche jobs in Fintech in designing and implementing IT services, solutions and platform

**Pass 20 units (5 courses) from the prescribed list:**

**BT4014 Analytics Driven Design of Adaptive Systems**

**IS3107 Data Engineering**

**IS4226 Systematic Trading Strategies and Systems**

**IS4228 Information Technologies in Financial Services**

**IS4233 Legal Aspects of Information Technology**

**IS4234 Governance, Regulation, and Compliance Technology**

**IS4242 Intelligent Systems and Techniques**

**IS4246 Smart Systems and AI Governance**

**IS4302 Blockchain and Distributed Ledger Technologies**

**IS4303 IT-Mediated Financial Solutions and Platforms**

# Bachelor of Computing (Information Systems)

## Artificial Intelligence (AI) System Solutioning Specialisation

Take on a career path in designing, implementing and managing AI, IoT and AR system solutions

### Pass 20 units (5 courses) from the prescribed list:

**BT3017 Feature Engineering for Machine Learning**

**BT4014 Analytics Driven Design of Adaptive Systems**

**BT4221 Big Data Techniques and Technologies**

**IS3107 Data Engineering**

**IS4151 AIoT Solutions and Development**

**IS4236 Cloud Services and Infrastructure Management**

**IS4242 Intelligent Systems and Techniques**

**IS4243 Information Systems Consulting**

**IS4246 Smart Systems and AI Governance**

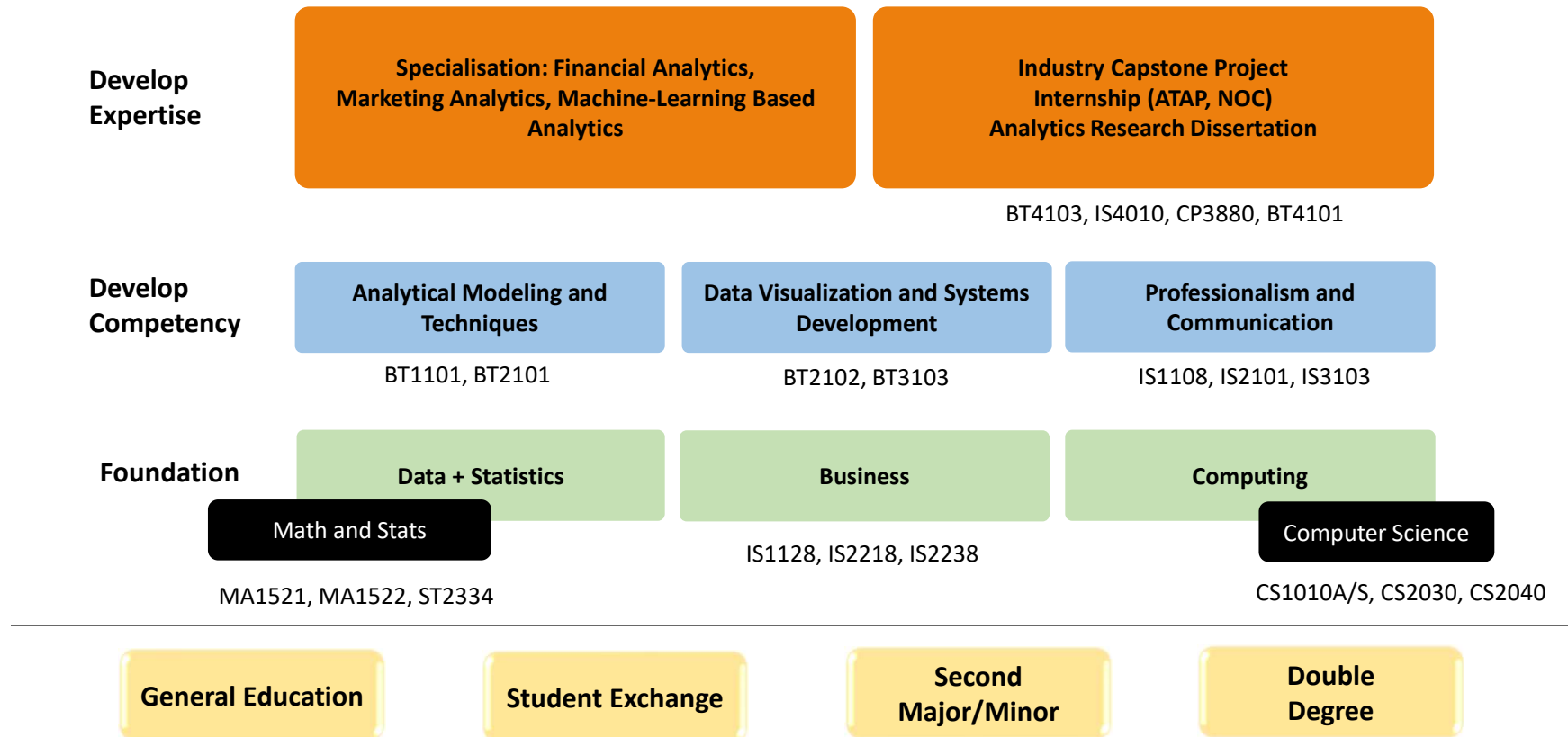
**IS4302 Blockchain and Distributed Ledger Technologies**

# Bachelor of Science (Business Analytics)



<https://www.comp.nus.edu.sg/cug/per-cohort/ba/ba-24-25/>

# Bachelor of Science (Business Analytics)



# Bachelor of Science (Business Analytics)

A-level intake

Year 1		Year 2		Year 3		Year 4	
S1	S2	S1	S2	S1	S2	S1	S2
<u>IS1108</u>	BT2102	BT2101	BT3103	BT4103 (Capstone, 8 Units)	PE4	Internship Or FYP (12 Units)	UE6
<u>CS1010A</u>	CS2030	CS2040	PE1		PE5		UE7
<u>BT1101</u>	IS2101	IS3103	PE2		PE3		UE1
MA1522	MA1521	ST2334	ULR/ID/CD	ULR/ID/CD	UE2	UE4	UE9
ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	UE3	UE5	UE10
20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	20 Units	20 Units
TOTAL GRADUATION REQUIREMENTS = 160 Units							

ULR/ID/CD = Common Curriculum Requirements

PE = Programme Elective

UE =Unrestricted Electives

# Bachelor of Science (Business Analytics)

Poly-level intake (with course exemptions)

Year 1		Year 2		Year 3		Year 4	
S1	S2	S1	S2	S1	S2	S1	S2
<u>IS1108</u>	BT2102	BT2101	BT3103	BT4103 (Capstone, 8 Units)	PE4	Internship Or FYP (12 Units)	
<u>CS1010A</u>	CS2030	CS2040	PE1		PE5		
<u>BT1101</u>	MA1521	IS3103	PE2		UE2		
IS2101	MA1522	ST2334	ULR/ID/CD	ULR/ID/CD	UE3	UE4	
<u>MA1301</u> (UE1)	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	ULR/ID/CD	UE5	
<b>20 Units</b>	<b>20 Units</b>	<b>20 Units</b>	<b>20 Units</b>	<b>20 Units</b>	<b>20 Units</b>	<b>20 Units</b>	<b>0 Units</b>
<b>TOTAL GRADUATION REQUIREMENTS = 160 Units - 20 Units from Unrestricted Electives</b>							



# Bachelor of Science (Business Analytics)

## Programme Electives (PE)

- Choose 5 Business Analytics PE courses to make up 20 Units
- At least 3 courses must be at level-4000
- At least 3 courses must be BT-coded courses

## BZA Areas:

- Business Applications
- Analytics Methods
- Technology Implementation

# Bachelor of Science (Business Analytics)

## A Sample of BZA Programme Electives

### Business Applications

IE3120 Manufacturing Logistics  
IS3150 Digital Media Marketing  
IS3240 Digital Platform Strategy and Architecture  
BT4013 Analytics for Capital Market Trading and Investment  
BT4016 Risk Analytics for Financial Services  
BT4211 Data-Driven Marketing  
BT4212 Search Engine Optimization and Analytics  
DBA4811 Analytical Tools for Consulting  
IS4241 Social Media Network Analysis  
IS4250 IT-enabled Healthcare Solutioning  
IS4262 Digital Product Management

### Analytics Methods

BT3017 Feature Engineering for Machine Learning  
BT3102 Computational Methods for Business Analytics  
BT3104 Optimization Methods for Business Analytics  
CS3243 Introduction to Artificial Intelligence  
CS3244 Machine Learning  
CS4248 Natural Language Processing  
BT4012 Fraud Analytics  
BT4015 Geospatial Analytics  
BT4221 Big Data Techniques and Technologies  
BT4222 Mining Web Data for Business Insights  
BT4240 Machine Learning for Predictive Data Analytics  
BT4241 Causal Impact Analytics for Business Applications  
IS4241 Social Media Network Analysis  
ST4245 Statistical Methods for Finance

### Technology Implementation

IS3107 Data Engineering  
BT4014 Analytics Driven Design of Adaptive Systems  
BT4301 Business Analytics Solutions Development and Deployment  
IS4226 Systematic Trading Strategies and Systems  
IS4228 Information Technologies in Financial Services  
IS4234 Governance, Regulation, and Compliance Technology  
IS4246 Smart Systems and AI Governance  
IS4302 Blockchain and Distributed Ledger Technologies  
IS4303 IT-Mediated Financial Solutions and Platforms





# Bachelor of Science (Business Analytics)

## Financial Analytics Specialisation

Pursue niche jobs in Investment, Banking, Finance, Trading, and Fund Management

**Pass 20 units (5 courses) from the prescribed list:**

**BT3102 Computational Methods for Business Analytics**

**BT4012 Fraud Analytics**

**BT4013 Analytics for Capital Market Trading and Investment**

**BT4016 Risk Analytics for Financial Services**

**BT4221 Big Data Techniques and Technologies**

**IS4226 Systematic Trading Strategies and Systems**

**IS4228 Information Technologies in Financial Services**

**IS4234 Governance, Regulation, and Compliance Technology**

**IS4302 Blockchain and Distributed Ledger Technologies**

**IS4303 IT-mediated Financial Solutions and Platforms**



# Bachelor of Science (Business Analytics)

## Marketing Analytics Specialisation

Take on a career to create strategic marketing campaigns and promotions using analytics tools

**Pass 20 units (5 courses) from the prescribed list:**

**BT3017 Feature Engineering for Machine Learning**

**BT4014 Analytics Driven Design of Adaptive Systems**

**BT4015 Geospatial Analytics**

**BT4211 Data-Driven Marketing**

**BT4212 Search Engine Optimization and Analytics**

**BT4222 Mining Web Data for Business Insights**

**IS3150 Digital Media Marketing**

**IS4241 Social Media Network Analysis**

**IS4262 Digital Product Management**

# Bachelor of Science (Business Analytics)

## Machine Learning-based Analytics Specialisation

Pursue careers to design and develop business analytic solutions with Machine Learning analytics and techniques

**Pass 20 units (5 courses) from the prescribed list:**

**BT3017 Feature Engineering for Machine Learning**

**BT4012 Fraud Analytics**

**BT4014 Analytics Driven Design of Adaptive Systems**

**BT4221 Big Data Techniques and Technologies**

**BT4222 Mining Web Data for Business Insights**

**BT4240 Machine Learning for Predictive Data Analytics**

**BT4301 Business Analytics Solutions Development and Deployment**

**CS3243 Introduction to Artificial Intelligence**

**CS4248 Natural Language Processing**

**IS4246 Smart Systems and AI Governance**

# Internship, Undergraduate Research Programmes, Entrepreneurship, and Work/Service Opportunities



# Internship

- 12-unit, 24-week compulsory internship requirement
  - may be substituted with 12-unit FYP dissertation
- Taken after 80 units and some core module prerequisites
- BZA/IS students can take ATAP or NOC to fulfill internship requirement (but not two 12-week SIP internships)
  - Advanced Technology Attachment Programme (24 weeks, individual)
  - NUS Overseas College Programme
- Can pursue more than one internship (additional ones will count as unrestricted elective units); do this more for exposure rather than getting into an internship arms race
- Possible to self-source internship but requires approval if to be taken with course credits
- Allowed to take up to two 4-unit courses during internship semester (subject to company approval)
- Not allowed to do internship in the final graduating semester (needs special approval)

# Undergraduate Research Programmes

- **Final Year Project (FYP) Dissertation (BT4101/CP4101) – 2 semesters; 12 units**
  - students who aim for Honours (Highest Distinction) must pass the Dissertation
  - condition “GPA of 4.00 or higher after completing at least 70% (112 units) of the unit requirement for the degree programme” must be satisfied before students can commence BT4101/CP4101.
  - FYP project selection process takes place one semester ahead of the semester in which the students commence BT4101/CP4101
  - doing FYP as well as internship? Yes, possible but not concurrently.
- **Computing Project (CP4106) – 2 semesters; 8 units**
  - open to all computing students who have completed at least 112 units.
  - students who are doing / plan to complete a Final Year Project (BT4101, CP4101, or any Integrated Honours Thesis/Project/Dissertation module) are **not** eligible to take CP4106
- **Independent Project (CP3106) – 1 semester; 4 units**

# Entrepreneurship

- Some courses like *IS3251 Principles of Technology Entrepreneurship* and *CP2201 Journey of the Innovator* provide opportunities to learn more about entrepreneurship
- Venture Initiation Programme (VIP@SoC)
  - <https://www.comp.nus.edu.sg/entrepreneurship/awards/iepsoc/>
- SoC Innovation Prize
  - <https://www.comp.nus.edu.sg/entrepreneurship/awards/ia/>
- Mixed teams comprising BZA and IS students are encouraged for such initiatives

# UG Teaching and Research Opportunities

- **Undergraduate Student Tutor**
  - \$40/hour (current rate)
  - Max of 16 hours per week during term time
  - Invitation email from UG Studies Office (around Jun and Nov)
- **Undergraduate Student Researcher**
  - \$20/hour (current rate)
  - Develop skills for FYP
  - Explore interests for postgraduate studies
- **NUS Student Work Scheme (NSWS)**  
<https://nus.edu.sg/cfg/students/jobs-internships/nsws>





# DISA Ambassadors

- You are our best voices for what the DISA student experience is all about.
- Our students have been involved in various activities as ambassadors:
  - NUS Open Day
  - SOC Info Session
  - SOC Academic Day
  - Pre-University Competition such as the NUS MUFG DELL HumanITy Challenge
  - ...
- Join us in building our student community!



# Thank You

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