

INFORMATION SYSTEMS

UNDERGRADUATE HANDBOOK

2017



**THE UNIVERSITY OF
AUCKLAND**
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

SCIENCE

Welcome to Information Systems



On behalf of the Department of Computer Science and the Department of Information Systems and Operations Management, I welcome you to the BSc degree majoring in Information Systems. Information Systems is the prime force driving the software and systems of the modern online realm. I am thrilled to see that you have chosen to be part of this realm,

and to make positive changes to it through your studies here at the University of Auckland. The major allows you to choose a wide range of courses from Computer Science, Information Systems and Operations Management. These courses include principles of application development, business system analysis, database systems, digital security, and computer graphics to name a few. You will be using some of the industry-standard languages and frameworks along the way.

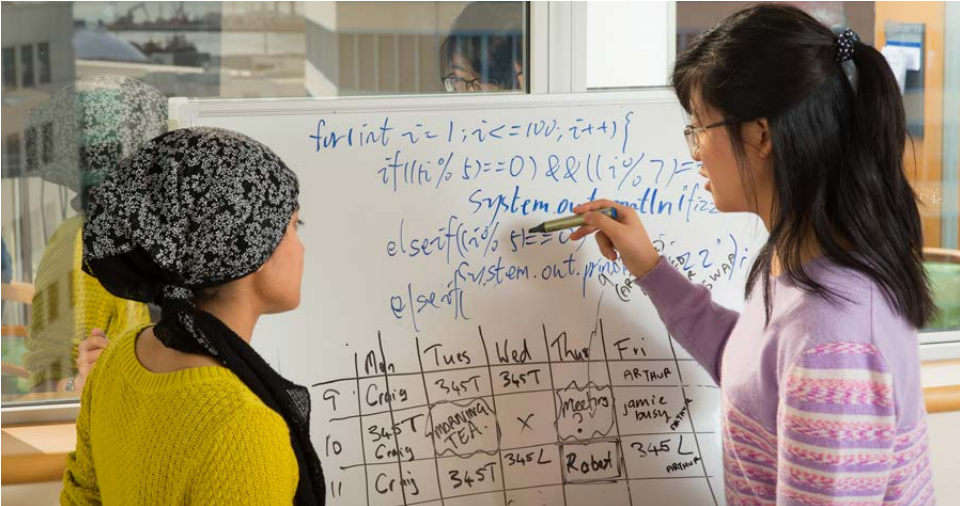
Please do not hesitate to get in touch with me should you require any assistance during your journey here at the University; we are here to help. Best of luck.

DR SATHIAMOORTHY MANOHARAN
Senior Lecturer



Bachelor of Science in Information Systems

The discipline of Information Systems deals with how information and communications technology can be used to achieve strategic goals. The focus is on developing and using cutting-edge products to solve important organisational problems.



3

The average number of years it takes to complete a Bachelor of Science degree



You can choose either a single or double major



Preparation for school leavers

Students are not required to have studied any sort of computing at high school. However, it would be beneficial to study NCEA Level 3 Mathematics, Physics and Digital Technologies (or equivalent).

For course planning and enrolment, go to www.science.auckland.ac.nz/student-centre
Thinking about postgraduate study options? Visit www.cs.auckland.ac.nz/pg

Complementary majors

You may wish to consider a double major to gain a broader base of skills and knowledge.

INFORMATION SYSTEMS +

- Applied Mathematics
- Computer Science
- Logic and Computation
- Mathematics
- Physics
- Statistics

Planning your major in Information Systems

BSc

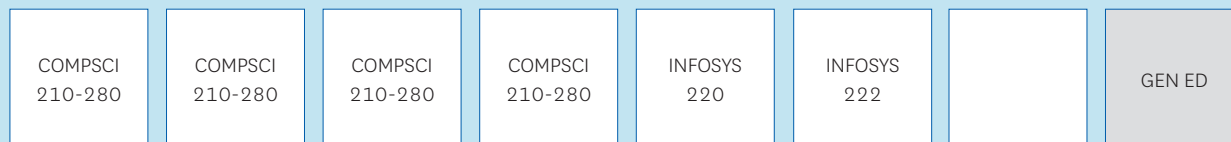


With appropriate prerequisites can also be filled by Stage II or III.

* COMPSCI 101 and 105 may be replaced with COMPSCI 107 in semester 1 if the prerequisites for COMPSCI 107 have been met.

Note:

1. Stage II COMPSCI courses require a GPA of 2.0 or higher.
2. COMPSCI 220 requires 15 points from MATHS 108, 110, 150 or 153.
3. COMPSCI 111 is a recommended course for this major.
4. Stage II Computer Science courses can be taken in the second semester of study if COMPSCI 107 is taken as an entry point paper.



Stage II or III



Any stage Science

1. Courses in a minimum of three subjects listed in the BSc Schedule.
2. At least 180 points (12 courses) must be above Stage 1.
3. Up to 30 points (2 courses) may be taken from outside the Faculty.
4. 30 points (2 courses) must be taken from the appropriate General Education Schedules for BSc students.

To view regulations for majors, and course descriptions, see www.calendar.auckland.ac.nz.
 BSc degree requires: 360 points (24 x 15 point courses). Each box represents one 15 point course.
 It is recommended that students enrol in 8 courses each year.

Degree Planners for double majors can be found at www.science.auckland.ac.nz/course-planning

Undergraduate Courses for a Major in Information Systems

Stage I

		Semester
ACCTG 101	Accounting Information	SS, S1, S2
COMPSCI 101	Principles of Programming	SS, S1, S2
COMPSCI 105	Principles of Computer Science	SS, S1, S2
COMPSCI 107	Computer Science Fundamentals	S1

Stage II

INFOSYS 220	Business Systems Analysis	
INFOSYS 222	Database Systems	

At least 4 courses from COMPSCI210-280:

COMPSCI 210	Computer Systems 1	S1, S2
COMPSCI 215	Computer Systems 2	S1
COMPSCI 220	Algorithms and Data Structures	S1, S2
COMPSCI 225	Discrete Structures in Mathematics and Computer Science	S1, S2
COMPSCI 230	Programming Techniques	S1, S2
COMPSCI 280	Introduction to Software Development	S2

Stage III

INFOSYS 322	Data Communications and the Internet	
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At least 2 courses from COMPSCI 313-373:

COMPSCI 313	Computer Organisation	S2
COMPSCI 314	Modern Data Communications	S2
COMPSCI 320	Applied Algorithmics	S2
COMPSCI 335	Distributed Objects, Services and Programming	S2
COMPSCI 340	Operating Systems	S2
COMPSCI 345	Human Computer Interaction	S1
COMPSCI 350	Mathematical Foundations of Computer Science	S1
COMPSCI 351	Fundamentals of Database Systems	S1
COMPSCI 367	Artificial Intelligence	S2
COMPSCI 369	Computational Science	S1
COMPSCI 373	Computer Graphics and Image Processing	S1

At least 2 courses from INFOSYS 320-344:

INFOSYS 320	Information Systems Design	S2
INFOSYS 321	Enterprise Systems	S2
INFOSYS 323	Management of Information Systems	S1
INFOSYS 330	Databases and Business Intelligence	S1
INFOSYS 338	Contemporary Issues in Information Systems	S2
INFOSYS 339	LANs, WANs, and Wireless Infrastructure	S1
INFOSYS 341	Management of Information Security	S1
INFOSYS 344	Special Topic	S2

We recommend that students take MATHS 108 or MATHS 150 and COMPSCI 111 as part of this major.

Please note: INFOSYS 110 and 345 are NOT part of the BSc (Information Systems) major and are not counted as BSc courses.

When planning Stage II courses, look at the Stage III courses you would like to take, and plan the prerequisites accordingly. Note: COMPSCI 280 is not a prerequisite for any Stage III course.

For course descriptions and prerequisite information, go to

www.science.auckland.ac.nz/information-systems

Careers in Information Systems

Studying Information Systems will equip you to develop creative and innovative solutions to problems in government, businesses and non-profit organisations. Information Systems graduates can find careers in an ever-widening variety of industries and roles:

Application Developer

Business Analyst

Computer Support Technician

Database/Systems Administrator

Game Developer

Geographical Information Systems Officer

Geospatial Specialist

IT Consultant

IT Sales Professional

IT Support Specialist

Information Systems Manager

Infrastructure Architect

Management Consultant

Network Engineer

Programmer

Project Manager

Quality Assurance Specialist

Setup Configuration Specialist

Software Architect

Systems Analyst

Systems Developer

Test Analyst

Web Developer



Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.



Helpful information

Academic dates	www.auckland.ac.nz/dates
Academic Integrity Course	www.auckland.ac.nz/academic-integrity
Accommodation	www.accommodation.auckland.ac.nz
Buy coursebooks	www.ubsbooks.co.nz
Career Development and Employment Services	www.auckland.ac.nz/careers
Course advice and degree planning in Science	www.science.auckland.ac.nz/student-centre
General Education	www.auckland.ac.nz/generaleducation
How to apply	www.apply.auckland.ac.nz
How to enrol	www.auckland.ac.nz/enrolment
International students	www.international.auckland.ac.nz
Māori and Pacific students	www.science.auckland.ac.nz/tuakana
Need help?	www.askauckland.ac.nz
Rainbow Science Network for LGBTI students	www.science.auckland.ac.nz/rainbowsience
Scholarships and awards	www.scholarships.auckland.ac.nz
Support for students	www.science.auckland.ac.nz/support

Applications close on 8 December.

Questions about Information Systems? Email office@cs.auckland.ac.nz



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