

Information Systems

Undergraduate Handbook 2018



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

SCIENCE
DEPARTMENT OF
COMPUTER 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 should you require any assistance during your journey here at the University; we are here to help.

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.



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

BSc degree planner – Information Systems

BSc

Year 1

COMPSCI 101	COMPSCI 105	ACCTG 101					
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With appropriate prerequisites can also be filled by Stage II or III.

COMPSCI 101 and 105 may be replaced with COMPSCI 107 in Semester One if the prerequisites for COMPSCI 107 have been met.

Note:

1. Stage II COMPSCI courses require a GPA of 2.0 or higher.
2. MATHS 108, 110 or 150 are recommended courses as some Stage II COMPSCI courses require 15 points from either of these as a prerequisite.
3. PHYSICS 140 and COMPSCI 111 are also recommended courses.

Year 2

COMPSCI 210-280	COMPSCI 210-280	COMPSCI 210-280	COMPSCI 210-280	INFOSYS 220	INFOSYS 222		GEN ED
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Stage II or III

Year 3

COMPSCI 313-373	COMPSCI 313-373	INFOSYS 320-341 344	INFOSYS 320-341 344	INFOSYS 322			GEN ED
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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 I
3. Up to 30 points (two courses) may be taken from outside the faculty
4. 30 points (two courses) must be taken from the appropriate General Education Schedules for BSc students
5. At least 75 points (five courses) must be at Stage III, of which 60 points (four courses) must be in the majoring subject

It is the student's responsibility to check that the final programme complies with University Regulations.
The Faculty of Science is the final authority on all BSc regulations.

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.
We recommend that students enrol in eight 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

Course code	Title	Semester
Stage I		
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 four 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	
At least two 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 two 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

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



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.science.auckland.ac.nz/resource-centre

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

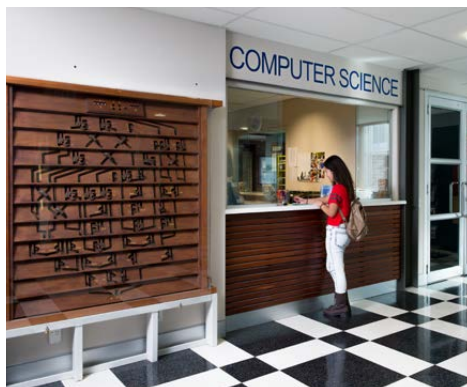
www.science.auckland.ac.nz/rainbowsience

Scholarships and awards

www.scholarships.auckland.ac.nz

Support for students

www.science.auckland.ac.nz/support



**APPLICATIONS CLOSE ON
8 DECEMBER FOR SEMESTER ONE.**

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

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.



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