

isa Computer Science Advising Guide

Detailed information about ISA programs at these host institutions is available on ISA's website by following the links below. If you would like to receive specific course syllabi, or have further questions about any of these recommendations, please feel free to contact ISA's Academic Affairs Department at academicaffairs@studiesabroad.com.

Courses are in English unless otherwise noted.

AFRICA

University of Cape Town (Cape Town, South Africa)

The Department of Computer Science at the [University of Cape Town](#) is amongst the strongest in the country and home to academic staff that are well regarded in the field, both nationally and internationally. The Department plays an important role in local industry and provides services to industries through technology transfer and applied research.

Sample Courses:

- [Computer Games](#)
- [Digital, Embedded & Adaptive Systems](#)
- [Modelling & Applied Computing](#)
- [Three-Dimensional & Distributed Games Design](#)
- [Computer Science 3002](#)

[Computer Science course list](#)

Other Regional Options:

- [University of the Western Cape](#) – Cape Town, South Africa
 - [Nelson Mandela University](#) – Port Elizabeth, South Africa
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ASIA

Hanyang University (Seoul, South Korea)

Offering a summer program with a wide range of courses, [Hanyang University](#) is a great option for students who wish to study computer science during a shorter program in the global city of Seoul. Available courses include “C++ Programming” and “Introduction to Computer Science.” This summer program was specifically designed for visiting international students and all courses are offered in English.

Course information:

- [Computer Science](#)

Korea University (Seoul, South Korea)

[Korea University](#) is one of the largest and most selective universities in South Korea. Since its establishment in 1905, Korea University has provided a top quality educational experience for its students, with a wide variety of courses taught in English in all professional fields offered to both local and international students. KU's College of Computer Science is a software specialized department established in 2014. The department aims to be recognized as a software-oriented department, leading through innovated courses and research.

Sample Courses:

- [Compiler](#)
- [Computer Architecture](#)
- [Digital Communications Theory](#)
- [Mobile Communications](#)
- [Programming Language](#)
- [Theory of Computation](#)

[Computer Science course list](#)

RMIT University Vietnam (Ho Chi Minh City, Vietnam)

[RMIT University Vietnam's](#) degree program in Information Technology offers a wide variety of courses in software design, development, and testing systems and is accredited by Australian Computer Society. The university also offers courses in

Software Engineering that allow students to engage in project-based learning. All ISA students who study at RMIT University Vietnam participate in a buddy program and are paired with a local student who assists them with the transition to RMIT and life in Vietnam.

Sample Courses:

- [Algorithms and Analysis](#)
- [Building IT Systems](#)
- [Database Concepts](#)
- [Information Systems Solutions and Design](#)
- [Programming 1](#)
- [Software Engineering Project Management](#)

[Information Technology course list](#)

Other Regional Options:

- [Mahidol University](#) – Bangkok, Thailand

EUROPE

Kingston University (London, England)

With courses in Computer Science, Cyber Security and Computer Forensics, Computer Games Programming, and Digital Media Technology available to visiting study abroad students, [Kingston University](#) is a good choice for students looking for a practice-based curriculum. Computer Science, Networks and Digital Media courses at Kingston are accredited by BCS, The Chartered Institute for IT.

Sample Courses:

- [Advanced Databases and the Web](#)
- [Database and UML Modelling](#)
- [Electronic and Web-based Processes](#)
- [Optimised Programming for Games Devices](#)
- [Programming I](#)
- [Web Communication and Programming](#)

[Computer Science course list](#)

Queen Mary, University of London (London, England)

[Queen Mary, University of London](#) is one of the leading research universities in the UK. The university's Computer Science degree program offers a broad range of courses from software engineering to programming. Courses include lectures, labs, and tutorials to ensure that students get a combination of supported learning with more hands on experience.

Computer Science Fields:

- [Computer Engineering](#)
- [Computer Information Systems](#)
- [Computer Programming](#)
- [Computer Science](#)
- [Information Technologies](#)

The American College of Greece (Athens, Greece)

Europe's oldest and largest U.S. college, [The American College of Greece](#) is home to students from over 70 countries. ACG's department of Information Technology offers courses in three general areas: software development, network technologies, and digital media technologies.

Sample Courses:

- [3D Modeling Methodologies](#)
- [Cognitive Computing with IBM Watson](#)
- [Distributed Systems](#)
- [Game Design](#)
- [Mobile Application Development](#)
- [Object Oriented Programming with C++](#)

[Information Technologies course list](#)

Maynooth University (Dublin, Ireland)

[Maynooth University](#) is the second oldest university in Ireland, having been established in 1795 as St. Patrick's College, Maynooth. In last twenty years, the university has gone through a major expansion and has constructed some of Ireland's most state of the art teaching, research, accommodation, and support facilities. Maynooth University offers ISA students a variety of courses in Computer Science, Software Engineering, and Multimedia, Mobile and Web Development.

Sample Courses:

- [Algorithms & Data Structures I](#)
- [Computation & Complexity](#)
- [Computer Graphics](#)
- [Computer Vision](#)
- [Media Programming](#)
- [Operating Systems](#)
- [Software Design](#)
- [Web Information Processing](#)

[Computer Science course list](#)

University of Glasgow (Glasgow, Scotland)

Founded in 1451, the [University of Glasgow](#) is the second oldest university in Scotland, fourth oldest university in the UK and ranked within the top 100 universities in the world. Since becoming the first university in Scotland to have an electronic computer in 1957, the University of Glasgow has built a reputation for innovation in Computing Science. Computing Science at Glasgow is ranked second for student course satisfaction in the UK (Guardian University Guide 2015).

Sample Courses:

- [Advanced Networking & Communications](#)
- [Algorithmics](#)
- [Big Data: Systems, Programming & Management 4](#)
- [Cyber Security 4](#)
- [Multimedia Systems & Applications 4](#)
- [Safety-Critical Systems Development](#)

[Computer Science course list](#)

Other Regional Options:

- [King's College London](#) – London, England
- [University of Westminster](#) – London, England
- [University of Reading](#) – Reading, England
- [Dublin City University](#) – Dublin, Ireland
- [University College Dublin](#) – Dublin, Ireland
- [National University of Ireland, Galway](#) – Galway, Ireland
- [University of Limerick](#) – Limerick, Ireland
- [Vrije Universiteit Amsterdam](#) – Amsterdam, The Netherlands
- [University of Stirling](#) – Stirling, Scotland
- [Universidad de Deusto, Bilbao](#) – Bilbao, Spain
- [Universidad Carlos III de Madrid](#) – Madrid, Spain

LATIN AMERICA

Universidad del Norte (Barranquilla, Colombia)

Founded in 1966, the [Universidad del Norte](#) is one of the top universities in Colombia and the Caribbean region. The university has received accreditation from national and international bodies, and the Civil, Electrical, Electronics, Industrial, Mechanical and Systems Engineering programs have been accredited by the Engineering Accreditation Commission of ABET. Courses are offered in Spanish and English.

Computer Science Fields:

- [Computer Science](#)
- [Computer Programming](#)
- [Computer Information Systems](#)

Other Regional Options:

- [Universidad de Belgrano](#) – Buenos Aires, Argentina (courses in Spanish)

- [Universidade do Sul de Santa Catarina](#) – Florianópolis, Brazil (courses in Portuguese)
- [Pontificia Universidad Católica de Valparaíso](#) – Valparaíso, Chile (courses in Spanish)

PACIFIC

University of Newcastle (Newcastle, Australia)

With Computer Science courses that prepare students to be experts at programming, design and management of computer resources, and system analysis, the [University of Newcastle](#) is consistently ranked as a top university for student satisfaction. With a student community and open lab workspace (Makerspace) and a robotic soccer team, the University of Newcastle offers a diversity of courses and extracurricular activities to Computer Science students. [Cricos Code: 00109J]

Computer Science Fields:

- [Computer Engineering](#)
- [Computer Information Systems](#)
- [Computer Programming](#)
- [Computer Science](#)
- [Information Technologies](#)

University of New South Wales (Sydney, Australia)

The School of Computer Science and Engineering at the [University of New South Wales](#) offers Computer Science courses with an Engineering focus. The School's goal is to educate students to be the designers of new technology. UNSW Engineering has maintained a number one ranking in Australia in the 2015 Academic Rankings of World Universities in the field of "Engineering/Technology and Computer Sciences." [Cricos Code: 00098G]

Sample Courses:

- [Algorithmic Verification](#)
- [Algorithms & Programming Techniques](#)
- [Concepts of Programming Languages](#)
- [Enterprise Database Management](#)
- [Microprocessors & Interfacing](#)
- [Software Construction: Techniques & Tools](#)
- [Systems Modelling & Design](#)

[Computer Science course list](#)

[Computer Information Systems course list](#)

University of Technology Sydney (Sydney, Australia)

Information Technology at the [University of Technology Sydney](#) is a leader in practice-based learning and industry engagement in Australia. Courses at UTS include major projects, real-life case studies, extensive group and field work, placing students' knowledge in real-world contexts. UTS is five star rated in the QS Stars rating system and is thus internationally recognized for its high performance in research, graduate employability, teaching quality and infrastructure. [Cricos Code: 00099F]

Sample Courses:

- [Applications Programming](#)
- [Database Fundamentals](#)
- [Embedded C](#)
- [Information System Development Methodologies](#)
- [Introduction to Data Analytics](#)

[Computer Science course list](#)

[Information Technologies course list](#)

University of Canterbury (Christchurch, New Zealand)

The department of Computer Science and Software Engineering at the [University of Canterbury](#) has a strong international reputation. Courses are regularly reviewed against international standards and the department's academic staff has one of the best records of research publications in the Pacific region. The department is housed in the custom-designed Erskine building with well-equipped computing laboratories.

Sample Courses:

- [Algorithms](#)
- [Artificial Intelligence](#)
- [Computer Graphics](#)
- [Formal Languages & Compilers](#)

- [Operating Systems](#)

- [Web Computing Architectures](#)

[Computer Science course list](#)

Other Regional Options:

- [Queensland University of Technology](#) – Brisbane, Australia
- [University of Queensland](#) – Brisbane, Australia
- [La Trobe University](#) – Melbourne, Australia
- [University of Melbourne](#) – Melbourne, Australia
- [Macquarie University](#) – Sydney, Australia
- [University of Sydney](#) – Sydney, Australia
- [University of the South Pacific](#) – Suva, Fiji
- [AUT University](#) – Auckland, New Zealand
- [University of Auckland](#) – Auckland, New Zealand
- [University of Otago](#) – Dunedin, New Zealand
- [Victoria University of Wellington](#) – Wellington, New Zealand