

Engineering 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 University of Cape Town (UCT) is the oldest university in South Africa and one of the continent's leading teaching and research institutions. The Faculty of Engineering and the Built Environment offers programs in the built environment sector, producing sought-after architects, planners, quantity surveyor, and professional engineers in a variety of areas, including chemical, civil, computer, electrical, electro-mechanical, and mechanical engineering and mechatronics. The faculty also offers exceptional class infrastructure and equipment. All engineering branches at UCT are accredited by the Engineering Council of South Africa, a signatory of the Washington Accord.

Engineering Fields:

- Chemical Engineering
- Civil Engineering

- Electrical Engineering
- Mechanical Engineering

Other Regional Option:

Nelson Mandela University – Port Elizabeth, South Africa

ASIA

Hanyang University (Seoul, South Korea)

With concentrated J-Term and summer programs, <u>Hanyang University</u> is a great option for students who wish to study Engineering during a shorter program in the global city of Seoul. Examples of engineering courses include Engineering Communication, Heat Transfer, and Statics. These programs were specifically designed for visiting international students and all courses are offered in English.

Course information:

J-Term Engineering

Summer Engineering

Korea University (Seoul, South Korea)

Korea University offers a large range of engineering courses in English across almost all disciplines. KU is one of the largest and most selective universities in Korea. The College of Engineering is comprised of 1 division, 5 departments, and 19 research centers. Embodying the idea of a "Global KU," the college hosts international students from all over the world. KU's College of Engineering has been recognized as meeting accreditation criteria by the Accreditation Board for Engineering Education of Korea, a signatory (along with ABET) of the Washington Accord.

Engineering Fields:

- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering

- Engineering Science
- Environmental Engineering
- Industrial Engineering
- Materials Science Engineering
- Mechanical Engineering

Other Regional Option:

• RMIT University Vietnam - Ho Chi Minh City, Vietnam

EUROPE

Queen Mary, University of London (London, England)

Queen Mary, University of London has an international reputation for quality, achievement and research success and is a part of the prestigious Russell Group. Queen Mary University is recognized by the Ministry of State for Universities, Science and Cities and also is a member of the Association of Commonwealth Universities (ACU). Queen Mary was ranked 98th in the 2014 QS World University Rankings. Queen Mary's School of Engineering and Materials Science (SEMS) provides excellent courses coupled with international research. Engineering programs at Queen Mary University are accredited by the Engineering Council UK, a signatory of the Washington Accord.

Engineering Fields:

- Aerospace Engineering
- Biomedical Engineering

- Materials Science Engineering
- Mechanical Engineering

Université Catholique de Lille (Lille, France)

Students taking the Science & Engineering summer programs at the <u>Université Catholique de Lille</u> have two different course options. In the Summer 3 program, students take one intensive French language course and one science and engineering course, as well as an introduction to intercultural communication. The science and engineering courses have a strong focus on environmental sciences, renewable resources, and sustainability and their political and economic impact. In the Summer 4 program, students take two science and engineering courses: 1 general elective and a technical elective. There is no French language course offered in the Summer 4 program. There is also a Back-to-Back option, where students take French language and an elective course in science or engineering for their first session and then two science and engineering courses during the second session.

Engineering Fields:

Bioengineering

Environmental Engineering

National University of Ireland, Galway (Galway, Ireland)

The College of Engineering and Informatics at NUI Galway consists of five disciplines; Civil Engineering, Electrical & Electronic Engineering, Information Technology, Mechanical Engineering and Biomedical Engineering. All disciplines have been recognized nationally and internationally for their cutting edge research. Members of the College have also been active participants in some of the highly successful larger University-wide research initiatives such as the National Centre for Biomedical Engineering Science and the Environmental Change Institute. NUI Galway's new Engineering Building is the largest School of Engineering & Informatics in the country at 14,200 square meters, housing 110 staff and approximately 1,100 students. NUI Galway's engineering programs have been accredited by Engineers Ireland, a signatory of the Washington Accord.

Engineering Fields:

- Biomedical Engineering
- Civil Engineering
- Computer Engineering

- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Universidad Carlos III de Madrid (Madrid, Spain)

The <u>STEM Courses with Locals in English</u> program at the <u>Universidad Carlos III de Madrid</u> (UC3M) offers a variety of lower and upper division science, technology, engineering and math courses, all of which are instructed in English by host university professors. Several of the engineering departments at UC3M have been awarded the <u>EUR-ACE</u> (European Accreditation of Engineering programs) label, as they satisfy the standards of the <u>ENAEE</u> (European Network for Engineering Accreditation).

Engineering Fields:

- Aerospace Engineering
- Biomedical Engineering
- Computer Engineering
- Electrical Engineering

- Electronics Engineering
- Environmental Engineering
- Mechanical Engineering
- Systems Engineering

Universitat Politècnica de València (Valencia, Spain)

The <u>STEM & Health Sciences Core and Spanish Language</u> program at the <u>Universitat Politècnica de València</u> focuses on developing students' technical skills in an international environment. This is an ideal program for students looking to take lower-division Engineering courses in Spain before embarking on upper-division courses for their STEM major.

STEM Fields:

- Biology
- Mathematics
- Mechanical Engineering

Physics

Systems Engineering

Other Regional Options:

- Kingston University London, England
- University of Reading Reading, England
- Dublin City University Dublin, Ireland
- University College Dublin Dublin, Ireland
- University of Limerick Limerick, Ireland
- University of Glasgow Glasgow, Scotland
- University de Deusto Bilbao, Spain

LATIN AMERICA

Universidad del Norte (Barranquilla, Colombia)

Founded in 1966, the <u>Universidad del Norte</u> 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. Engineering courses are taught in English and Spanish.

Engineering Fields:

- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Engineering Science
- Environmental Engineering

- Industrial Engineering
- Materials Science Engineering
- Mechanical Engineering
- Systems Engineering

Other Regional Options:

- Pontificia Universidad Católica de Valparaíso Valparaíso, Chile (courses in Spanish)
- Universidad Adolfo Ibáñez Viña del Mar, Chile (courses in Spanish)
- Pontificia Universidad Católica del Perú Lima, Peru (courses in Spanish)

PACIFIC

Queensland University of Technology (Brisbane, Australia)

All of the undergraduate engineering courses at <u>QUT</u> are professionally accredited by Engineers Australia (EA), a signatory of the Washington Accord. Students study in QUT's new \$230 million Science and Engineering Centre and Community Hub which integrates science, technology, engineering, and mathematics disciplines in a world leading model. [Cricos Code: 00213J]

Engineering Fields:

- Aerospace Engineering
- Civil Engineering
- Computer and Software Engineering
- Electrical Engineering

- Engineering Science
- Mechanical Engineering
- Systems Engineering

University of Melbourne (Melbourne, Australia)

Undergraduates studying Engineering (or Systems) at the <u>University of Melbourne</u> can take courses focusing on Bioengineering, Chemical, Civil, Computing & Software, Electrical, Mechanical, or Spatial Systems. Housed in the Bachelor of Science program, all undergraduate engineering courses at Melbourne maintain the high standards of quality teaching that distinguish the university. All Engineering Systems programs at the University of Melbourne are accredited by Engineers Australia, a signatory of the Washington Accord. [Cricos Code: 00116K]

Engineering Fields:

- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering

- Engineering Science
- Environmental Engineering
- Materials Science Engineering
- Mechanical Engineering

University of Newcastle (Newcastle, Australia)

The <u>University of Newcastle</u> has a strong engineering school with offerings across all disciplines. The university has been at the forefront in the development of Problem-Based Learning (PBL) and provides a practical, hands-on education. The University of Newcastle also is one of the most affordable semester programs in Australia. The engineering departments at the University of Newcastle have been accredited by Engineers Australia, a signatory of the Washington Accord. [Cricos Code: 00109J]

Engineering Fields:

- Chemical Engineering
- Civil Engineering
- Electrical Engineering

- Environmental Engineering
- Mechanical Engineering

University of New South Wales (Sydney, Australia)

With the largest School of Engineering in Australia, the <u>University of New South Wales</u> offers undergraduate courses in more than 25 different engineering specializations. UNSW Engineering is ranked #21 in the world according to recent QS rankings. The engineering departments at the University of New South Wales have been accredited by Engineers Australia, a signatory of the Washington Accord. [Cricos Code: 00098G]

Engineering Fields:

- Aerospace Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering

- Electronics Engineering
- Environmental Engineering
- Materials Science Engineering
- Mechanical Engineering

AUT University (Auckland, New Zealand)

The <u>AUT University</u> is recognized by the Ministry of Education, New Zealand. AUT was ranked in the top 51-100 institution in the world in the 2014 Accounting and Finance QS World University Rankings by Subject. The AUT School of Engineering's degrees are professionally accredited and internationally benchmarked: <u>IPENZ</u> (Institution of Professional Engineers NZ) recognizes AUT's Bachelor of Engineering (Honors) as meeting the Washington Accord and the Bachelor of Engineering Technology as meeting the <u>Sydney Accord</u>. The maritime majors at the Australian Maritime College are accredited by Engineers Australia.

AUT offers an internship opportunity to qualified students.

Engineering Fields:

- Computer Engineering
- Electrical Engineering
- Engineering Science

- Materials Science Engineering
- Mechanical Engineering

University of Canterbury (Christchurch, New Zealand)

One of the top two engineering schools in New Zealand, the <u>University of Canterbury</u> offers robust courses across all disciplines. The university places particular emphasis on sustainable systems engineering, seeking to preserve New Zealand's natural

beauty while moving ahead technologically. In addition, the civil engineering department is ranked 19th in the world. Engineering programs at the University of Canterbury are accredited by the Institution of Professional Engineers New Zealand (IPENZ), a signatory of the Washington Accord.

Engineering Fields:

- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Electronics Engineering

- Engineering Science
- Environmental Engineering
- Mechanical Engineering

Other Regional Options:

- University of Queensland Brisbane, Australia
- Griffith University Gold Coast, Australia
- La Trobe University Melbourne, Australia
- Macquarie University Sydney, Australia
- University of Sydney Sydney, Australia
- University of Technology Sydney Sydney, Australia
- James Cook University Townsville, Australia
- University of the South Pacific Suva, Fiji
- University of Auckland Auckland, New Zealand
- Victoria University of Wellington Wellington, New Zealand