Computer Systems Engineering and Computer Science Double Degree
Bachelor of Engineering (Computer Systems Engineering), Bachelor of Science (Computer Science) - BSc(Curtin), BSc(Curtin) - BB-CSECMP
Science and Engineering

Computer systems explore the role of computers as elements in engineering systems. In the first two years of this course, you will study alongside electrical and communication engineering students. In third year, you will choose a specialisation in computer systems engineering and explore areas such as artificial intelligence, robotics, machine vision, computer-aided design and manufacture, automation and process control. Prior to graduation, you'll complete at least 12 weeks of engineering work experience, making your theoretical studies meaningful and industry ready.

Computer Science is concerned with the concepts and technology that operating systems, programming languages and software are based upon. Issues such as how operating systems are designed and how they function, what is involved in designing a new programming language, artificial intelligence and how it is employed in software applications are covered. It aims to give you a high level understanding of the theory and technology that drives computers and computer networks in today's world so that you will have the knowledge and ability to adapt to new ideas and technologies. There is a strong emphasis on mathematics in this course as computer science theory and application is mathematically based.

This double degree provides graduates with a background in computer science and its application in computer systems, electrical and electronic and communication engineering. The combination of the two degrees provides graduates with versatility, which opens up a wide range of employment opportunities. On completion of the program, students are awarded both the Bachelor of Engineering (Computer Systems Engineering) and Bachelor of Science (Computer Science).

Entry requirements:
Indicative TER (ATAR)*:
\[ \text{80} \]
STAT entry*:
Not accepted.

Essential WACE courses:
- At least three of the following:
  Mathematics 3C/3D, Mathematics: Specialist 3C/3D, Physics 3A/3B and Chemistry 3A/3B

Desirable WACE courses:
Engineering Studies 3A/3B

Other requirements:
High-achieving students without one of the prerequisite subjects may be accepted and required to undertake an additional program of preparatory studies.

Where:
Bentley

When:
February or July

How:
Full-time or part-time
High achieving students may complete an additional honours year enabling them to undertake their own significant research project.

Career opportunities

This course can help you become a:

- Information Technology Administrator
- Systems Designer (Information Technology)
- Computer Engineer
- Analyst (Information Technology)
- Programmer (Information Technology)
- Information Technology Support Technician

Why Computer Systems Engineering and Computer Science Double Degree?

- Computer engineering is one of the fastest growing and largest areas of engineering with an estimated one million practitioners across the globe. Computers in the form of microprocessors are being embedded in almost every other form of system to control them or provide additional services, creating a strong demand for qualified computer engineers both locally and internationally.
- This course has run for more than two decades - longer than equivalent courses in most other universities in Australia. It was the first of its kind in WA.
- Graduates enjoy very good employment opportunities in computing, networking, resources, automation, automobile, banking and many other service sectors.
- The course is based on the IEEE-ACM Joint Task Force recommended curricula for computer engineering. It is a fully accredited program.
- Excellent opportunities for vacation work and graduate employment programs.
- Lecturers have real industry experience.
- Excellent links to industry.

Study:

On-campus

Duration:

5 years full time. In certain cases, the need to complete special units may extend the duration.

Fees (indicative first year only):

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<th>Year</th>
<th>Student type</th>
<th>Cost</th>
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<td>2016</td>
<td>Commonwealth supported What is a Commonwealth supported place (CSP)?</td>
<td>$8,920*</td>
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<td>A CSP is subsidised by the Australian Government. They pay part of the course fees directly to Curtin and then the student pays the remainder. The student can defer this fee to their HECS-HELP loan.</td>
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<td>All Australian students studying an undergraduate degree are automatically awarded a Commonwealth supported place.</td>
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<td>Learn more about CSPs and whether you’re eligible by visiting the Australian Government’s StudyAssist website.</td>
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*The indicative first-year fee is calculated on 200 credit points, which is the typical full-time study load per year, however some courses require additional study to be completed, in which case the fee will be higher than that shown.

This fee is a guide only. It may vary depending on the units you choose and do not include incidental fees (such as lab coats or art supplies) or the cost of your textbooks - visit other fees and charges for more information. For more information on fees and to determine your eligibility for HECS-HELP or FEE-HELP, please visit fee basics or the Study Assist website.

If you’re not an Australian citizen, permanent resident or New Zealand citizen, please see information for international students.

Find out more:
Credit for previous study

If you have previously worked or studied in this field, you are encouraged to contact the Faculty to discuss eligibility for recognition of prior learning.

Full Course Structure

Please refer to the Handbook's full course structure when enrolling.