UQ ENGINEERING
CHINA PARTNER PROGRAM
3+1+1

STUDY ABROAD AND
MASTER OF ENGINEERING SCIENCE HANDBOOK
This document details the process used within the Faculty of Engineering, Architecture and Information Technology (EAIT) to stage you through your Study Abroad year and Master of Engineering Science.

You will enrol via the arrangement between The University of Queensland (UQ) and your home institution to undertake your final year of a Bachelor of Engineering as a Study Abroad student at The University of Queensland.

Students who successfully complete their UQ Study Abroad year are awarded an engineering degree from their home university and are eligible to apply for the Master of Engineering Science at The University of Queensland.

The following pages summarise the rules and program requirements, however students should consult the University courses and programs website (www.uq.edu.au/study/) for the official set of rules and program requirements for program(s). All program rules must be read in conjunction with the University’s General Award Rules (www.uq.edu.au/myadvisor/university-rules).
You will enrol as a Study Abroad student in a modified Bachelor of Engineering program. Each semester you should complete a total of #8 units and at the end of semester you receive a finalised result for all courses. The study plans for each of the specialisations within the Bachelor of Engineering set out in the table below. These study plans are a guide only and students are required to meet with an academic advisor prior to commencement.

<table>
<thead>
<tr>
<th>When</th>
<th>Chemical Engineering Study Plan - Courses</th>
<th>Civil Engineering Study Plan - Courses</th>
<th>Electrical Engineering Study Plan - Courses (Biomedical specialisation)</th>
<th>Electrical Engineering Study Plan - Courses (Microwave and Communications specialisation)</th>
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<tbody>
<tr>
<td>July–Nov</td>
<td>• CHEE3005: Reaction Engineering (#2) • CHEE3004: Unit Operations (#2) • CHEE3007 - Process Modelling and Dynamics (#2) • Part B4 Advanced Elective (#2) (Please consult with Academic Advisor)</td>
<td>• CIVL4512: Civil Design II (#2) or CIVL4516 Civil Design III (#2) • CIVL3510: Introduction to Project Management (#2) • #4 from Part B2: Advanced Electives from the Civil Engineering course list¹</td>
<td>• ENGG4802: Thesis Project (#4, year long) • ELEC4601: Medical Imaging (#2) • ELEC4403: Medical and Industrial Instrumentation (#2) • COSC2500: Numerical Methods in Computational Science (#2)</td>
<td>• ENGG4802: Thesis Project (#4, year long) • COMS4105: Communication Systems (#2) • ELEC4620: Digital Signal Processing (#2) • COSC2500: Numerical Methods in Computation Science (#2)</td>
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<tr>
<td>Feb – June</td>
<td>• CHEE4002: Environmental Risk Assessment (#2) • CHEE4009: Transport Phenomena (#2) • CHEE4060: Process &amp; Control System Synthesis (#2) • Part B4 Advanced Elective (#2) (Please consult with Academic Advisor)</td>
<td>• CIVL4514: Civil Design I (#2) • #6 from Part B2: Advanced Electives from the Civil Engineering course list¹</td>
<td>• ENGG4802: Thesis Project (#4, year long) • ENGG4810: Team Project II (#2) • BIOM2011: Integrative Cell &amp; Tissue Biology (#2) • ELEC4630: Image Processing and Computer Vision (#2)</td>
<td>• ENGG4802: Thesis Project (#4, year long) • COMS4103: Photonics (#2) • COMS4104: Microwave Subsystems &amp; Antennas (#2) • ENGG4810: Team Project II (#2)</td>
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</table>

¹. The choice of courses from Part B2 – Advanced Electives from the Civil Engineering course list will depend on your preference and prerequisite knowledge. One of the academic advisors for civil engineering students, Dr David Callaghan, Dr Vinh Dao or Dr Robert Day, will assist you with course selection.
### Electrical Engineering Study Plan - Courses (Power specialisation)
- **ENGG4002**: Thesis Project (#4, year long)
- **ELEC4400**: Advanced Electronic and Power Electronics Design (#2)
- **ELEC4302**: Power System Protection (#2)
- **COSC2500**: Numerical Methods in Computational Science (#2)

### Materials Engineering Study Plan - Courses
- **MECH4950**: Special Topics (#2) and #6 from -
  - AERO4300: Aerospace Composites (#2)
  - CHEE4301: Nanomaterials & Their Characterisation (#2)
  - CHEE4302: Electrochemistry and Corrosion (#2)
  - MECH4301: Materials Selection (#2)

### Mechanical Engineering Study Plan - Courses
- **ENGG4011**: Professional Engineering Project (#6) and #2 from -
  - CHEE3301: Polymer Engineering (#2)
  - MECH3300: Finite Element Method & Fracture Mechanics (#2)
  - MECH4304: Net Shape Manufacturing (#2)
  - Other approved elective (#2) (Please consult with Academic Advisor)
- **ENGG4001**: Professional Engineering Project (#6) and #2 from -
  - MECH3300: Finite Element Method & Fracture Mechanics (#2)
  - MECH4300: Thermodynamics & Heat Transfer (#2)
  - METR4201: Introduction to Control Systems (#2)

### Software Engineering Study Plan - Courses
- **ENGG4802**: Thesis Project (#4, year long)
- **ENGG4810**: Team Project II (#2)
- **ENGG4802**: Thesis Project (#4, year long)
- **ENGG4810**: Team Project II (#2)

#6 from undergraduate counterparts of MEngSc (Software) Parts A, B or D -
- **COMP3301**: Operating Systems Architecture (#2)
- **COMP3702**: Artificial Intelligence (#2)
- **COMP4500**: Advanced Algorithms & Data Structure (#2)
- **ENGG4020**: Systems Safety Engineering (#2)

2. As part of your Study Abroad year you have the opportunity to undertake a research project. MECH4950 – Special Topics is the course where you plan your engineering project. You select your thesis topic and supervisor, do the background research, establish the methods for solving the problem and prepare a project schedule in consultation with your supervisor to enable the completion of ENGG4011 in the subsequent semester.

3. **ENGG4011** – Professional Engineering Project is commenced after successful completion of MECH4950. ENGG4011 is an individual project taken under the guidance of the same supervisor as for MECH4950. The project can take one of the following two forms: (i) an original theoretical and/or experimental investigation or (ii) the design of an engineering product or development of a computer program.

4. These courses are a guide only. For a full list of available courses, please check with your academic advisor. Fourth year Bachelor of Engineering (Software Engineering) courses are shadow coded in parts B, C, or D of the Master of Engineering Science (Software Engineering) #16. No credit or exemption will be given to students who enrol in the Master of Engineering Science (Software Engineering) for courses undertaken in the Bachelor of Engineering (Software Engineering).
For Zhu Yutong, from Tianjin University, The UQ China Partner Programme in engineering is a great academic collaboration providing students a chance to study in both Chinese and Australian universities.

“I finished the first three years of study in my home university, and will get credits from UQ to finish my fourth year and get the degree from my home university.”

“I find the tutorial classes quite useful to my study here because I can discuss issues with peers and tutors, a way of study that is different from Chinese universities.”

“The clean environment and mild climate of Brisbane is enjoyable, and life at UQ is very colourful. The library resources are particularly useful and easy to access.”

Zhu has also become involved in activities outside of the classroom. “I’m currently the Vice-President (Education) of the Australia-China Youth Association at UQ and I’m committed to the communication between youth from the two countries.”

“I’m planning to continue in the Masters program at UQ. I think the industry placement course within this program will be very useful to my future career.”

“Most Chinese university students who want to pursue education overseas could only wait until they graduate, but this program allows me study overseas within my bachelor degree, and gives me opportunities to experience both Chinese and Australian education.”
The Master of Engineering Science is a one year, full time program and a list of courses in this program can be found on the Programs and Courses website: [http://www.uq.edu.au/study/](http://www.uq.edu.au/study/).

The study plans for each of the specialisations within the Master of Engineering Science are set out in the table below. These study plans are a guide only and students are required to meet with an academic advisor prior to commencement.

<table>
<thead>
<tr>
<th>Program Rules</th>
<th>Electrical Engineering Study Plan – Courses</th>
<th>Software Engineering Study Plan – Courses</th>
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<tbody>
<tr>
<td>For the Master of Engineering Science (Electrical Engineering) (#16), you need to complete -</td>
<td>• up to #4 from Part B; and</td>
<td>For the Master of Engineering Science (Software Engineering) (#16) you need to complete –</td>
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<tr>
<td>• #2 from Part C, and</td>
<td>• at least #4 from Part D in a particular field, and</td>
<td>• #4 from Part C, and</td>
</tr>
<tr>
<td>• the balance from Parts D and E.</td>
<td>• the balance from Parts D and E.</td>
<td>• the balance from Part D and Part E.</td>
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<tr>
<td>July-Nov</td>
<td>• ENGG7302: Advanced Computational Techniques in Engineering (#2)</td>
<td>• ENGG7804 Postgraduate Project B (year long, #2 per semester)²</td>
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<td></td>
<td>• Part D Elective (#2) or ENGG7804 Engineering Postgraduate Project B (year long, #2 per semester)²</td>
<td>• CSSE7610 Concurrency: Theory and Practice or INFS7410 Information Retrieval and Web Search (#2)</td>
</tr>
<tr>
<td></td>
<td>• Part B Elective (#2)</td>
<td>• #4 from MEngSc(Software) Part B or D³</td>
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<tr>
<td></td>
<td>• Part D Field Elective¹ (#2)</td>
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<tr>
<td>Feb – June</td>
<td>• Part D Elective (#2) or ENGG7804 Engineering Postgraduate Project B (year long, #2 per semester)²</td>
<td>• ENGG7803: Postgraduate Project B (year long, #2 per semester)²</td>
</tr>
<tr>
<td></td>
<td>• Part D Elective (#2)</td>
<td>• CSSE7032: Models of Software Systems (#2)</td>
</tr>
<tr>
<td></td>
<td>• Part B Elective (#2)</td>
<td>• #4 from MEngSc(Software) Part B or D³</td>
</tr>
<tr>
<td></td>
<td>• Part D Field Elective¹ (#2)</td>
<td></td>
</tr>
</tbody>
</table>

1. Part D Field Electives to be at least #4 from a particular field

2. This is a year-long course. You will need to enrol in this course in two semesters. At the end of your first semester, you will see a grade of IP on your transcript, which means ‘In Progress’. Your grade for this course will be applied at the end of your second semester of enrolment in the course.

3. Fourth year Bachelor of Engineering (Software Engineering) courses are shadow coded in Parts B, C, or D of the Master of Engineering Science (Software Engineering) #16. No credit or exemption will be given to students who enrol in the Master of Engineering Science (Software Engineering) for courses undertaken in the Bachelor of Engineering (Software Engineering).
### Undeclared Study Plan -
Courses for students undertaking a Chemical, Civil, Materials, Mechanical or Mechatronic Engineering project

| Program Rules | For the Master of Engineering Science (undeclared) (#16), you need to complete -
| | • #6 from Part A;
| | • one field of study comprising #4 or #8 from Part B; and
| | • balance from Part C. |

| July-Nov | • ENGG7242 - Engineering Project 4A (#4 – year long project)
| | • ENGG7601 - Experimental Design (#2)
| | • Elective (#2) from Part C
| | [OR] • ENGG7282 - Engineering Project 8A (#8 – year long project)
| | • ENGG7601 - Experimental Design (#2)
| | • Elective (#2) from Part C |

| Feb – June | • ENGG7242 - Engineering Project 4A (#4 – year long project)
| | • ENGG7600 - Advanced Engineering Practice (#2)
| | • MATE7001 - Environmental Performance of Materials (#2)
| | [OR] • ENGG7282 - Engineering Project 8A (#8 – year long project)
| | • ENGG7600 - Advanced Engineering Practice (#2)
| | • MATE7001 - Environmental Performance of Materials (#2) |

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4. Students undertaking a Civil Engineering project can only take the ENGG7242 #4 - year long project.

5. Before you can enrol in a project course you need to find a project and a supervisor. Instructions on finding a project and supervisor is available online (www.mechmining.uq.edu.au/mengsc-thesis). When you have confirmed your project topic and supervisor, complete a Permission to Enrol Form and submit this to the School of Mechanical and Mining Engineering (Level 2, Frank White Building). The permission form is found online (www.mechmining.uq.edu.au/mengsc-thesis).

Your project supervisor helps guide your research project, monitors and advises on your progress towards completion of your thesis, and mentors your academic development. You need to meet with your supervisor regularly during the year. If you are having difficulties finding a supervisor in your field, please contact the relevant academic advisor (www.eait.uq.edu.au/academic-advice).
**GENERAL INFORMATION**

*If you are a prospective student (applicants in China):*

Please contact Ms Lute Coremans from the Engineering, Architecture and Information Technology (EAIT) Faculty Office (international@eait.uq.edu.au). For general enquiries about studying at UQ please contact: study@uq.edu.au.

*Questions about entry into the Masters, fees, visas (students enrolled at UQ):*

Questions from current UQ students regarding their application for the Masters program and issues related to their visa, payment of fees, or issues of a personal nature should be directed to the Faculty Office. The EAIT Faculty Office is located in Room S204, Level 2 of the Hawken Engineering Building (enquiries@eait.uq.edu.au).

*Academic Advising for students at UQ:*

**Study Abroad year** An academic advisor will provide advice that will help you to enrol correctly. The principal academic advisors by specialisation are:

- Chemical: Dr Liu Ye
- Civil: Dr Robert Day
- Electrical: A/Prof Aleksandar Rakic
- Software: Prof Paul Strooper
- Materials: Professor Jin Zou
- Mechanical: Professor Han Huang

All students should meet with their academic advisor during Orientation Week.

**Masters year** The academic advisors for the Master of Engineering Science are available online: [www.eait.uq.edu.au/academic-advice](http://www.eait.uq.edu.au/academic-advice).

*Scholarship:*

Current Chinese students undertaking the Study Abroad year as part of the 3+1+1 Engineering Partner Program at UQ and intending to articulate into the Master of Engineering Science (Coursework) program are eligible to apply for the following scholarship. For more details on the application process please visit: [www.eait.uq.edu.au/int-pg-scholarships](http://www.eait.uq.edu.au/int-pg-scholarships)

**3+1+1 China Engineering Partner Program**

This scholarship provides AUD$5,000 towards the first semester tuition fees in the Master of Engineering Science program. The successful applicant must be a citizen of the People's Republic of China and classed as an international student in Australia (Australian permanent residents and Australian citizens are not eligible).
**myAdvisor**
myAdvisor is the University's website which gathers into one place a wide range of essential information for students including material on enrolment, assessment, financial matters, services, policies, and students' rights and responsibilities.  
www.uq.edu.au/myadvisor

**mySi-net**
Students must enrol on-line and maintain personal details using mySi-net. Students are asked to ensure that they have completed all enrolment requirements as set out in The University of Queensland Enrolment Guide, which can be accessed via mySi-net. All students are also provided with an email account.  
www.sinet.uq.edu.au

It is important that you regularly read your student emails. All official University correspondence is sent to your student email and it is assumed that this information is read and acted upon.

**Terminology explained**
There is an extensive list of UQ Terminology online.  
www.uq.edu.au/study/terminology

**Timetables**
Timetables are published on mySi-net and contain the most up-to-date information available. As the timetable is subject to constant change leading up to week one of classes (this is due to fluctuating enrolment numbers) it is very important that you check your timetable and email daily at the beginning of semester. The myAdvisor website has information on how to read your timetable, and how to sign-on for classes.  
www.sinet.uq.edu.au

**Transcripts**
At the end of your second study abroad semester, your home university will receive a complimentary copy of your study abroad academic transcript. Your home university will use this transcript to confirm that you have met the requirements of your degree, and will inform UQ that you are eligible to enrol in the Master of Engineering Science.

When you graduate from your Master of Engineering Science you will also receive a complimentary copy of your academic transcript, which will include your study abroad details.

**Tuition fees**
Students pay fees in accordance with the University's Fee Rules, and fees increase annually. Students should also view information on living and other expenses which is accessible from the same web site. You must enrol and pay your fees by the due date each semester. Additional administrative charges will be incurred for late enrolment, and late payment of fees and charges. Further information is available in the Enrolment Guide and on the myAdvisor website.

You will pay Study Abroad fees for your enrolment during your incoming exchange program and postgraduate coursework fees during your enrolment in the Master of Engineering Science.  
www.uq.edu.au/study/ (what it costs)

**Visas**
You must have a valid student visa that covers the duration of your enrolment at UQ. Information regarding this is provided with your offer material. At present, you will apply for two visas – one for your study abroad, and one for your Master of Engineering Science.