Bachelor of Computer Science

Welcome
Recording of this Presentation

Students, please be aware that this session is being recorded so it can be made available via the Faculty of EAIT orientation page. The reason we are recording the orientation presentation is to make it available for your future reference, and to support students who may not have been able to attend today’s session.

Suggested options for students not wishing to be recorded:

- Turn off video and mute audio
- Use a proxy name for Zoom (student attendance will still be on record with the Course Coordinator)

Please note that students are not permitted to record teaching without the explicit permission of the Course Co-ordinator. This includes recording classes using Zoom.

For further information:

- PPL 3.20.06 Recording of Teaching at UQ
Covid-Safety today

• You will need to check-in with the “Check in Qld” App at each building you visit
• Maintain 1.5m distancing:
  - Spread out to use space in rooms
  - Observe 1.5m spacing during queuing
• Masks: You will be required to wear a face mask for the majority the day (and absolutely mandatory where 1.5m spacing is not possible).
• Follow hand hygiene, and (particularly during afternoon activities) sanitise hands and wipe tables regularly.
• If you are unwell now or become unwell during the day, please let a staff know as soon as possible (cough, fever, sore throat, fatigue, loss of smell or taste, vomiting, diarrhoea or shortness of breath)
• Please observe the directions of staff throughout the day
Gianluca Demartini

BSc & MSc in CS at U. of Udine, Italy
PhD in CS at U. of Hannover, Germany
  • Information Retrieval

Worked at U. Sheffield iSchool (UK), the eXascale Infolab (CH),
UC Berkeley (US), Yahoo! (ES), L3S Research Center (DE)
U. Queensland since 2017
  - A/Prof. at the School of ITEE

Collaborations with: Amazon, Facebook, Google, IBM, Microsoft, Spotify

www.gianluca demartini.net
Computer Science - Jobs vs Graduates

The “STEM” problem is in computer science

- 58% of all new jobs in STEM are in computing
- 10% of STEM graduates are in Computer Science

Source: code.org
Data Centers

Source: facebook.com
Challenges and Opportunities of AI

OpenAI built a text generator so good, it’s considered too dangerous to release

Zack Whittaker @zackwhittaker / 6 hours ago

Source: techcrunch.com
BCompSci Majors

Data Science
Cyber Security
Programming Languages
Machine Learning
Scientific Computing
Essential Information and Getting Started
UQ Terminology

- **Program** = degree you’re studying, e.g. BCompSc or dual degree
- **Course** = subject
  - Each course has a course code (e.g. “CSSE1001”)
- **Unit** = measure of workload of a course
  - Most courses are 2 units
  - Standard study load is 8 units per semester (4 courses)
  - BCompSc require 48 units (typically 6 semesters = 3 years)
- **Faculties:** Administer degree programs
- **Schools:** Teach courses and give academic advice
Bachelor of Computer Science Structure

48 units

No Major

16 units (BCompSc Core Courses)

2 units (Extension Course)

14 units (Intro and Adv Electives)

16 units (electives)

OR

Single Major

16 units (BCompSc Core Courses)

16 units (Intro and Adv Electives)

16 units (electives)

OR

Two Major Option

16 units (BCompSc Core Courses)

16 units (Intro and Adv Electives)

16 units (electives)

In BCompSc you can major in:

- Data Science
- Cyber Security
- Programming Languages
- Machine Learning
- Scientific Computing

See https://www.itee.uq.edu.au/bachelor-computer-science
Year 1 – Bachelor of Computer Science Enrolment

Semester 1
- CSSE1001*
- INFS1200*
- MATH1061*
- Elective or Major specific

Semester 2
- CSSE2002*
- CSSE2010*
- STAT1201*
- Elective or Major specific

*Offered both semesters

Done Maths C (> SA)??
- Do MATH1051 (Sem 1)
- Or do MATH1071: Strong Interest in Maths or Maths dual degree (Recommend >HA in Maths C)

Haven’t Done Maths C??
- Do MATH1050 (Sem 1)
- Do MATH1051 (Sem 2)
Note: MATH1050 counts as an elective – not part of the BCompSc part A, B or C

Seek advice about electives

See https://www.itee.uq.edu.au/bachelor-computer-science for study plans for all majors
Dual Degree Programs

- Dual Degrees Available With BCompSc:
  - Arts
  - Engineering (Hons)
  - Science
  - Mathematics
  [not all majors may be available]
- Vertical dual Degrees (w/ Master of Cyber Security or w/ Master of Data Science)
- To enter dual degree if in single degree:
  - Apply via mySI-net or QTAC as per advice on myUQ
  - Must meet entry criteria (OP/rank cut-off and prerequisites for both)
- To drop back to single degree if in dual degree
  - Apply for program change via mySI-net by Friday before Orientation Week

Typical Year 1 Enrolment Pattern:

- Academic advice strongly recommended!
- Engineering duals will typically have 3 Engineering courses per semester in Year 1 & 2
Other Enrollment Planning Considerations

• Credit for Previous Studies:
  - **Previous UQ students:** Credit will be automatically assessed by Faculty
  - **Other students:** Apply to Faculty and include course outlines and official, original transcripts from the other institution

  - Semester long exchanges: Good to start planning in year 1.
  - Short Term Experiences

• Honours Year:
  - Optional fourth year after completion of your program
  - Advanced coursework and honours project
Tips for Successful Transition to Study at UQ
## Transition – Some Differences from High School

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>HIGH SCHOOL</th>
<th>UNIVERSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priorities</td>
<td><strong>Teachers</strong> and schools set.</td>
<td><strong>You</strong> balance: study, work, fun ...</td>
</tr>
<tr>
<td>Study</td>
<td>Mostly in class; homework = back-up.</td>
<td><strong>You</strong> schedule: 2 - 3 h for every h in class.</td>
</tr>
<tr>
<td>Reading/ reviewing</td>
<td>Sometimes listening in class was enough.</td>
<td><strong>You</strong> need to review notes/ texts regularly.</td>
</tr>
<tr>
<td>Due dates</td>
<td><strong>Teachers</strong> remind you.</td>
<td><strong>You</strong>. Reminders not a given – use Course Profiles/ Blackboard.</td>
</tr>
<tr>
<td>Seeking help</td>
<td><strong>Teachers</strong> approach you if they believe you need assistance.</td>
<td><strong>You</strong> need to initiate contact for assistance.</td>
</tr>
<tr>
<td>Availability of help</td>
<td><strong>Teachers</strong> often available during the school day. <strong>Teachers</strong> primary job is teaching students in their classes</td>
<td><strong>You</strong> need to make an appointment if outside scheduled course time. For most lecturers, teaching is only 40% of their job.</td>
</tr>
<tr>
<td>Missing a class</td>
<td><strong>Teachers</strong> provide you with info you missed when you were absent.</td>
<td><strong>You</strong> need to get missed notes from classmates or Blackboard.</td>
</tr>
<tr>
<td>Attending lectures</td>
<td><strong>Teachers</strong> monitor class attendance.</td>
<td><strong>Your</strong> choice.</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>Assessment highly specified</td>
<td>Assessment requirements may include deliberate uncertainty</td>
</tr>
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Transition – Time Management

Each course is designed with the expectation you spend 10-12 hours per week of combined class/study time to pass the course.

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<tr>
<td>Class time (per week)</td>
<td>30 h (6 h/d)</td>
<td>15 to 20 h (?? h/d)</td>
</tr>
<tr>
<td>Class schedule</td>
<td>Continuous – 0900-1500</td>
<td>Not continuous – 0800-2000</td>
</tr>
<tr>
<td>Yearly commitment</td>
<td>40 weeks (4 terms)</td>
<td>2x 13-week semesters of lectures followed by 1-week for study (swot vac) and 2-weeks exams</td>
</tr>
</tbody>
</table>

- Draw up a weekly schedule of class and study time.
- Use a semester calendar to show assessment submission dates.
Balance your Life & Enjoy Your time at UQ

- Enjoy your independence!
- Ensure you have stable living and transport arrangements
- Carefully balance Study/Work/Social/Hobbies/Family Responsibilities
  - Clubs and Societies day today
- Computing related societies:
  - UQ Cyber Squad: [https://cybersquad.uqcloud.net/](https://cybersquad.uqcloud.net/)
Getting Help And Support

• Help with your academic work?
  - Tutors in class; course coordinators; check course profile and website
  - ITEE learning centre 78-217, and tutors: 78-204
  - UQ Library: workshops and support for finding information
  - Student Services Learning advisors & Workshops
• Problems working out what courses to enrol in or problems within your courses?
  - ITEE School Office: 78-425 (GPSouth Building)
  - Book appointments here to see academic advisors
• Problems with your program/degree?
  - EAIT Faculty Office: 50-S204 (Hawken Building)
• EAIT Student Employability Team: Help get prepared for professional job applications! www.eait.uq.edu.au/employability, 50-C305
• Student Services: International advisers; Disability Advisers; Counsellors; Accommodation; Employment
• Look after yourself: Sleep, exercise, eat well
BCompSci First Year Advisor

Matt Luscombe
78-457 (Level 4 of GP South)
m.luscombe@uq.edu.au

Formal Academic Advising appointments via email to:
studentenquiries@itee.uq.edu.au

- Study plans, UQ Abroad study plans, Show Cause study plans
- **Elective** selection
- **Major** selection
- General advice about being at UQ/ITEE
What’s Next?

- **10.30am-12.00:** Welcome Presentation (Hawken)
- **12.15-1.15pm (Level 2 Hawken):**
  - EAIT Expo & Lunch: Meet student societies and ways you can get involved, and grab some lunch.
  - Drop-in Academic Advising: Got questions about your courses for this semester?
- **1.15-3.15pm (49-301):** Group Orientation Activities
- **4.00-5.00pm:** International Students Information & Support (Zoom) – see orientation website

UQ Nav App: https://my.uq.edu.au/mobile-apps