Connect with technology at UWS

Information and Communication Technology (ICT) has penetrated into major functional areas of all industry sectors, such as retail, banking, health and education, etc. and requires ICT professionals with cross-discipline knowledge and skills. The speed of change in ICT requires professionals to update their knowledge and skills every few years. UWS Postgraduate ICT (PG-ICT) courses recognise this. Our PG-ICT courses concentrate on developing and extending students’ knowledge and skills needed for ICT roles within the fast growing ICT industry and other industry sectors where ICT is used. This is reflected in our range of specialisations and rich set of units that cover core ICT discipline topics such as Networking, Cloud Computing, Web and Mobile Computing, and cross discipline topics such as Management and Health Informatics.

Under the PG-ICT umbrella there are four courses: Graduate Certificate in ICT, Graduate Diploma in ICT, Master of ICT and Master of ICT (Advanced). These courses have a cascading structure that allows students to move from one course to another for further studies. Students from both ICT backgrounds and non-ICT backgrounds can enrol in these courses to advance their knowledge and skills in an ICT discipline, to be more adaptive to the high demands of the ICT industry and/or to proceed to Higher Degree Research (HDR) studies. Anecdotal evidence suggests that more than 80 per cent of the ICT workforce has not acquired university-level qualifications in ICT. These courses offer you formal training in the theoretical aspects of ICT and thus a solid base from which to continue your progression in the ICT field.

COURSE SUMMARY

<table>
<thead>
<tr>
<th>UAC CODE</th>
<th>COURSE NAME</th>
<th>STUDY MODE</th>
<th>CAMPUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>950249</td>
<td>Master of Information and Communications Technology (Advanced)</td>
<td>2-2.5F/4-5P Parramatta</td>
<td></td>
</tr>
<tr>
<td>950251</td>
<td>Master of Information and Communications Technology</td>
<td>1.5-2F/3-4P Parramatta</td>
<td></td>
</tr>
<tr>
<td>950255</td>
<td>Graduate Diploma in Information and Communications Technology</td>
<td>1-1.5F/2-3P Parramatta</td>
<td></td>
</tr>
<tr>
<td>950256</td>
<td>Graduate Certificate in Information and Communications Technology</td>
<td>0.5-1F/1-2P Parramatta</td>
<td></td>
</tr>
</tbody>
</table>
Career opportunities
UWS PG-ICT courses are designed to fulfil the skill requirements of (but not limited to) the following roles:

• ICT Consultant
• Software Engineer
• Database Administrator
• Project Manager
• Business Analyst
• ICT Architect
• Systems Administrator
• Systems Analyst
• Computer Network Systems Engineer
• Software & App Programmer
• ICT Security Specialist

Specialisations
The following specialisations are available in PG-ICT studies at UWS.

Networking
The Networking specialisation is aimed at providing students with knowledge in emerging areas of networking. It focuses on essential fundamentals as well as advanced knowledge on the principles, practices, protocols and standards in some key areas of the networking discipline. This specialisation prepares students for careers in network security and management, multimedia and wireless communications, and other contemporary and emerging networking areas. The specialisation is also designed to introduce students to trends and key research areas in some emerging fields of networking so as to provide students with initial skills and knowledge for future research studies or careers.

Distributed Computing
The Distributed Computing specialisation provides students with in-depth knowledge for the analysis, design and evaluation of distributed systems. It offers the students the opportunity to develop the research and technical skills needed for development and management of a broad range of large-scale systems including distributed systems, cloud computing and big data applications.

Management
The Management specialisation, in Master of Information and Communication Technology and Master of Information and Communication Technology (Advanced) courses, brings the key areas of contemporary management practices into the ICT discipline. The aim of the specialisation is to prepare students to move from technical positions such as programmer, network administrators and business analyst into a supervisory, senior management, executive or CIO role within the IT industry. In this specialisation, emphasis is placed on topics such as strategic management, understanding contemporary business environment, financial reporting, economics, and people and organisation management.

Web and Mobile Computing
The widespread deployment of web and mobile devices has made them a tool for companies to carry out their everyday business. Contemporary developers are expected to understand the strengths and limitations of web and mobile technologies so as to create successful user-friendly web and/ or mobile applications. This specialisation is aimed at developing knowledge and skills in the theoretical concepts and practical technologies needed to design and develop complex software applications across a range of web and mobile platforms. Students with these knowledge and skills will have greater prospects of finding employment with reputable companies or building their career as self-employed developers.

Health Informatics
The widespread adoption of ICT solutions within the health sector and related developments such as electronic health records and health systems interoperability have created a need for ICT professionals who understand their context and are well equipped to operate within it. This specialisation is aimed at developing knowledge and skills in theoretical concepts and practical technologies needed to design and develop complex software applications across a range of eHealth settings. Students with these knowledge and skills will have greater prospects of finding employment with major healthcare providers or building their career as self-employed developers.

Industry Placement
You will undertake 120 hours full-time or part-time equivalent industry placements as a Work Integrated Learning (WIL) component. You will work in an external organisation in Australia or within a department/division within UWS carrying out tasks related to ICT. This will provide you with real-world ICT industry experience in Australia. You can nominate an external organisation of your choice.

Professional accreditation
UWS has a long history of providing well-designed degrees in ICT that are accredited at the professional level by the Australian Computer Society (ACS).

Accreditation for the Advanced course is being sought at professional level.

Entry requirements
See the tables in this brochure.

Additional information
The course length and structure vary based on the student’s previous study background and level, and work experience. Applicants seeking admission on the basis of work experience must support their application with a statement of service for all work experience listed on the application.
Pathway A:
Students with non-computing/non-ICT/non-information systems (IS) with Bachelor qualifications must have a minimum of a 3-year undergraduate degree in any discipline OR approved Diploma course in ICT/Computing/IS fields AND a minimum of 5 years full-time equivalent work experience in ICT which includes experience in applying skills in: programming, networking, database design and development, systems analysis and design, and project management.

<table>
<thead>
<tr>
<th>MICT (Advanced)</th>
<th>MICT</th>
<th>Grad Dip in ICT</th>
<th>Grad Cert in ICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program length</td>
<td>2.5 years</td>
<td>2 Years</td>
<td>1.5 Years</td>
</tr>
<tr>
<td>Total credit points (CP)</td>
<td>200</td>
<td>160</td>
<td>120</td>
</tr>
</tbody>
</table>

**Core units**
- 12 core units (120 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - Network Technologies
  - Professional Practice and Communication
  - Research Preparation in Post Graduate Studies
  - Advanced Topics in ICT
  - Web Technologies
  - Big Data (PG)
  - IT Project Management
  - Master Project 1
  - Master Project 2
- 8 core units (80 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - Network Technologies
  - Professional Practice and Communication
  - Research Preparation in Post Graduate Studies
  - IT Project Management
  - Master Project 1
- 6 core units (60 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - IT Project Management
  - Network Technologies
  - Professional Practice and Communication

**Elective units**
- 8 elective units (80 CPs) from Foundation, Specialised or Multi-disciplinary unit lists
- 8 elective units (80 CPs) from Foundation, Specialised or Multi-disciplinary unit lists
- 6 elective units (80 CPs) from Foundation or Specialised unit lists
- 5 elective units (50 CPs) from Foundation unit lists

**WIL component**
- Students must complete Work Integrated Learning component
  - ICT Practicum
- Students must complete one of the specialisations detailed above. Units related to the specialisation should be taken as part of the total credit points.

**Specialisation**
Students must complete one of the specialisations detailed above. Units related to the specialisation should be taken as part of the total credit points.

Pathway B:
Students with non-computing/non-ICT/non-IS with Honours or Masters qualifications must have an Honours or Masters qualification in any discipline.

<table>
<thead>
<tr>
<th>MICT (Advanced)</th>
<th>MICT</th>
<th>Grad Dip in ICT</th>
<th>Grad Cert in ICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program length</td>
<td>2 Years</td>
<td>1.5 Years</td>
<td>1 Year</td>
</tr>
<tr>
<td>Total credit points (CP)</td>
<td>160</td>
<td>120</td>
<td>80</td>
</tr>
</tbody>
</table>

**Core units**
- 12 core units (120 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - Network Technologies
  - Professional Practice and Communication
  - Research Preparation in Post Graduate Studies
  - Advanced Topics in ICT
  - Web Technologies
  - Big Data (PG)
  - IT Project Management
  - Master Project 1
  - Master Project 2
- 8 core units (80 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - Network Technologies
  - Professional Practice and Communication
  - Research Preparation in Post Graduate Studies
  - IT Project Management
  - Master Project 1
- 6 core units (60 CPs)
  - Programming Proficiency
  - Systems Analysis and Database Management Systems
  - Advanced Topics in User System Interaction
  - IT Project Management
  - Network Technologies
  - Professional Practice and Communication

**Elective units**
- 4 elective units (40 CPs) from Foundation, Specialised or Multi-disciplinary unit lists
- 4 elective units (40 CPs) from Foundation, Specialised or Multi-disciplinary unit lists
- 2 elective units (20 CPs) from Foundation or Specialised unit lists
- 1 elective unit (10 CPs) from Foundation unit lists

**WIL component**
- Students must complete Work Integrated Learning component
  - ICT Practicum
- Students must complete one of the specialisations detailed above. Units related to the specialisation should be taken as part of the total credit points.

**Specialisation**
Students must complete one of the specialisations detailed above. Units related to the specialisation should be taken as part of the total credit points.
### Pathway C

Students with computing/ICT/IS Bachelor qualifications must have a minimum of a 3-year undergraduate degree in ICT, computing or information systems disciplines OR a minimum of a 3-year undergraduate degree in any discipline AND a minimum of 5 years full-time equivalent work experience in ICT which includes experience in applying skills in: programming, networking, database design and development, systems analysis and design, and project management OR a minimum of a 3-year undergraduate degree in any discipline AND Graduate Diploma in ICT or Postgraduate Diploma in ICT offered prior to 2015 at UWS or equivalent qualifications from any other reputable tertiary educational institute OR a minimum of a 3-year undergraduate degree in any discipline AND a Graduate Diploma in ICT offered after 2015 at UWS or equivalent qualifications from any other reputable tertiary educational institute. Students with a computing/ICT/IS Honours or Masters qualifications must have Honours or Masters qualification in ICT, computing or information systems disciplines.

<table>
<thead>
<tr>
<th>Program length</th>
<th>MICT (Advanced)</th>
<th>MICT</th>
<th>Grad Dip in ICT</th>
<th>Grad Cert in ICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total credit points (CP)</td>
<td>160</td>
<td>120</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>Core units</td>
<td>9 core units (90 CPs)</td>
<td>5 core units (50 CPs)</td>
<td>3 core units (30 CPs)</td>
<td>1 core unit (10 CPs)</td>
</tr>
<tr>
<td></td>
<td>• Network Technologies</td>
<td>• Network Technologies</td>
<td>• IT Project Management</td>
<td>• Professional Practice and Communication</td>
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<td>• Professional Practice and Communication</td>
<td>• Professional Practice and Communication</td>
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<tr>
<td></td>
<td>• Research Preparation in Post Graduate Studies</td>
<td>• Research Preparation in Post Graduate Studies</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Advanced Topics in ICT</td>
<td>• IT Project Management</td>
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</tr>
<tr>
<td></td>
<td>• Web Technologies</td>
<td>• Master Project 1</td>
<td></td>
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<tr>
<td></td>
<td>• Big Data (PG)</td>
<td>• Master Project 2</td>
<td></td>
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<tr>
<td></td>
<td>• IT Project Management</td>
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<tr>
<td></td>
<td>• Master Project 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Master Project 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective units</td>
<td>7 elective units (70 CPs) from Foundation, Specialised or Multi-disciplinary unit lists</td>
<td>7 elective units (70 CPs) from Foundation, Specialised or Multi-disciplinary unit lists</td>
<td>5 elective units (50 CPs) from Foundation or Specialised unit lists</td>
<td>3 elective units (30 CPs) from Foundation unit lists</td>
</tr>
<tr>
<td>WIL component</td>
<td>Students must complete Work Integrated Learning component</td>
<td>Students must complete Work Integrated Learning component</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• ICT Practicum</td>
<td>• ICT Practicum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialisation</td>
<td>Students must complete one of the specialisations detailed above, Units related to the specialisation should be taken as part of the total credit points.</td>
<td>Students must complete one of the specialisations detailed above, Units related to the specialisation should be taken as part of the total credit points.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### English proficiency requirements

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website at uac.edu.au

### Recognition of prior learning

Special equivalence may be granted to you on the basis of evidence submitted at the time of application for academic, professional and/or any other qualifications you hold.

### Early Exit Options

Students who initially enroll either in the Master of ICT OR Master of ICT (Advanced) programs can opt to graduate early with a Graduate Diploma in ICT or Graduate Certificate in ICT after completing required units for these courses.

### How to apply

Postgraduate course applications are processed online through the Universities Admissions Centre (UAC) at uac.edu.au/postgraduate

Further information on postgraduate courses and the application procedure is available at myfuture.uws.edu.au

For international students

International students need to apply direct to the University. Part-time mode for some of these courses is not available to international students due to Australian student visa regulations.

Application forms and information on admission are available at uws.edu.au/international/admissions

For information about studying at UWS, including courses, tuition fees, English requirements, intakes, assessment methods, accommodation options and living in Australia, please visit uws.edu.au/international