

# MASTER OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (RESEARCH)

Western Sydney University Program Code: 8112  
AQF Level: 9

Students should follow the program structure for the session start date relevant to the year they commenced.

The Master of Information and Communications Technology (Research) program exposes students to advanced topics and research in ICT. This program is comprised of a coursework component that is followed by a full-time-equivalent year of supervised research training. The primary objective of this program is to provide students with an opportunity to develop research skills appropriate to the ICT discipline. This program provides a pathway to Higher Degree Research studies by engaging students in research projects within the university or in collaboration with an external organisation.

## Study Mode

Two and a half years full-time.

## Location

Campus	Attendance	Mode	Advice
Parramatta Campus	Full time	Internal	

## Accreditation

The Master of Information and Communications Technology (Research) is accredited at Professional Level by the Australian Computer Society

To be eligible for admission, you must have successfully completed

- A Bachelor degree, Bachelor Honours degree or a Masters degree in any discipline.

To be eligible for up to 40 credit points of advanced standing, you must have successfully completed

- An undergraduate degree in Information and Communication Technologies (ICT), Computing or Information Systems; or
- An undergraduate degree in any discipline and a Graduate Certificate or Graduate Diploma in Information and Communication Technologies (ICT).

Advanced standing from foundation units are subject to approval by the relevant Director of Academic Programs (DAP).

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.

Statement of Service ([https://hbook.westernsydney.edu.au/file:///ad.uws.edu.au/dfshare/HomesK-W\\$/30042629/Downloads/Statement\\_of\\_Service%20\(1\).PDF](https://hbook.westernsydney.edu.au/file:///ad.uws.edu.au/dfshare/HomesK-W$/30042629/Downloads/Statement_of_Service%20(1).PDF))

## How to apply

Please use the link below for details on the application process.

Application Process - Master of Information and Communications Technology (Research) (<https://www.westernsydney.edu.au/future/>)

[study/how-to-apply/higher-degree-research-candidates/How-to-apply-for-the-Master-of-Information-and-Communications-Technology.html](https://www.westernsydney.edu.au/future/study/how-to-apply/higher-degree-research-candidates/How-to-apply-for-the-Master-of-Information-and-Communications-Technology.html))

Qualification for this award requires the successful completion of 200 credit points as per the recommended sequence below.

## Full-time start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
INFS 7007	Systems Analysis and Database Management Systems	10
COMP 7015	Programming Proficiency	10
INFO 7003	Advanced Topics in User System Interaction	10
ENGR 7017	Professional Practice and Communication	10
<b>Credit Points</b>		<b>40</b>
<b>2H session</b>		
HUMN 4001	Researcher Development 1: Reading, Writing, and the Business of Research	10
<b>Credit Points</b>		<b>10</b>
<b>Spring session</b>		
COMP 7013	Network Technologies	10
INFO 7005	IT Project Management	10
Select one Alternate subject from List 1, List 2 or List 3		10
<b>Credit Points</b>		<b>30</b>
<b>Year 2</b>		
<b>1H session</b>		
HUMN 4002	Researcher Development 2: Proposing and Justifying Research	10
<b>Credit Points</b>		<b>10</b>
<b>Autumn session</b>		
COMP 7003	Big Data	10
INFS 7003	Advanced Topics in ICT	10
Select one Alternate subject from List 1, List 2 or List 3		10
<b>Research Quarter 3 &amp; 4 sessions</b>		
Please note INFO 9002 is a year-long subject studied in Research Quarters, 20cp per Quarter		40
INFO 9002	Higher Degree Research Thesis - Information Technology	
<b>Credit Points</b>		<b>70</b>
<b>Year 3</b>		
<b>Research Quarter 1 &amp; 2 sessions</b>		
Please note INFO 9002 is a year-long subject studied in Research Quarters, 20cp per Quarter		40
INFO 9002	Higher Degree Research Thesis - Information Technology	
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>200</b>

## Full-time mid-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
INFS 7007	Systems Analysis and Database Management Systems	10

COMP 7015	Programming Proficiency	10
ENGR 7017	Professional Practice and Communication	10
COMP 7013	Network Technologies	10
<b>Credit Points</b>		<b>40</b>
<b>1H session</b>		
HUMN 4001	Researcher Development 1: Reading, Writing, and the Business of Research	10
<b>Credit Points</b>		<b>10</b>
<b>Autumn session</b>		
INFO 7003	Advanced Topics in User System Interaction	10
INFS 7003	Advanced Topics in ICT	10
Select one Alternate subject from List 1, List 2 or List 3		10
<b>Credit Points</b>		<b>30</b>
<b>Year 2</b>		
<b>2H session</b>		
HUMN 4002	Researcher Development 2: Proposing and Justifying Research	10
<b>Credit Points</b>		<b>10</b>
<b>Spring session</b>		
INFO 7005	IT Project Management	10
COMP 7003	Big Data	10
Select one Alternate subject from List 1, List 2 or List 3		10
<b>Research Quarter 1 &amp; 2 sessions</b>		
Please note INFO 9002 is a year-long subject studied in Research Quarters, 20cp per Quarter		40
INFO 9002	Higher Degree Research Thesis - Information Technology	
<b>Credit Points</b>		<b>70</b>
<b>Year 3</b>		
<b>Research Quarter 3 &amp; 4 sessions</b>		
Please note INFO 9002 is a year-long subject studied in Research Quarters, 20cp per Quarter		40
INFO 9002	Higher Degree Research Thesis - Information Technology	
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>200</b>

### List 1 - Foundation Subjects

Subject	Title	Credit Points
INFO 7003	Advanced Topics in User System Interaction	10
INFS 7004	Content Management Systems and Web Analytics	10
INFO 7005	IT Project Management	10
COMP 7013	Network Technologies	10
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
INFS 7008	Systems and Network Security	10
INFS 7009	Web Technologies	10

### List 2 - Specialised Subjects

Subject	Title	Credit Points
COMP 7018	Advanced Cloud Computing	10
PUBH 7001	Advanced Health Classifications and Coding	10

INFS 7001	Advanced Healthcare Data Environments	10
INFS 7002	Advanced Healthcare Software and Systems	10
INFO 7001	Advanced Machine Learning	10
MECH 7004	Advanced Mobile Robotics	10
MECH 7005	Advanced Robotics	10
INFO 7002	Advanced Topics in Artificial Intelligence	10
INFS 7003	Advanced Topics in ICT	10
COMP 7002	Advanced Topics in Networking	10
COMP 7019	Applied Machine Learning	10
COMP 7020	Artificial Intelligence Ethics and Organisations	10
COMP 7003	Big Data	10
COMP 7004	Cloud Computing	10
INFO 7018	Cloud Systems Development	10
COMP 7006	Data Science	10
COMP 7008	Internet of Things	10
COMP 7021	Knowledge Representation and Reasoning	10
COMP 7009	Mobile Computing	10
COMP 7011	Multimedia Communication Systems	10
COMP 7022	Natural Language Understanding	10
COMP 7012	Network Management	10
MATH 7011	Predictive Analytics	10
MATH 7017	Probabilistic Graphical Models	10
MATH 7012	Programming for Data Science	10
MATH 7014	Social Media Intelligence	10
INFS 7006	Software Testing and Automation	10
MATH 7016	The Nature of Data	10
COMP 7016	Visualisation	10
INFO 7013	Web Engineering	10
COMP 7017	Wireless Networking	10

### Replaced Subjects

The specialised subjects listed below count towards completion of this program for students who passed these subjects in 2020 or earlier.

MATH 7007 Genomic Data Science

INFO 7008 Software Architectures

### List 3 - Multidisciplinary Subjects

Subject	Title	Credit Points
BUSM 7018	Contemporary People Management	10
ECON 7001	Economics	10
ACCT 7015	Financial Reports for Decision Making	10
BUSM 7040	Governance, Ethics and Social Entrepreneurship	10
BEHV 7036	Research Internship and Engagement	10
BUSM 7086	Strategic Business Management	10
BUSM 7094	The Contemporary Business Environment	10
BUSM 7099	Understanding Contemporary Organisations	10
HUMN 4003	Writing Beyond the Academy: Knowledge Translation and Public Audience Communication	10

### Replaced Subjects

The core subjects listed below count towards completion of this program for students who passed these subjects in 2019 or earlier.

HUMN 4009 Research Design 1: Theories of Enquiry

HUMN 4010 Research Design 2: Practices of Research