# GRADUATE DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY (3700)

Approved Abbreviation: GradDipICT

Western Sydney University Program Code: 3700

AQF Level: 8

CRICOS Code: 110875M

Program Status: CURRENT

This program applies to students who commenced in 2017 or later.

The Graduate Diploma in Information and Communication Technology (Grad Dip in ICT) is designed for students from both computing and non-computing backgrounds, to enable them to create pathways into higher studies in ICT and/or commencing a career in ICT. This program is aimed at allowing students to gain knowledge in state of the art developments in the ICT field, apply that knowledge in a professional and ethical framework and develop themselves as lifelong learners.

## Study Mode

One year full-time. Two years part-time.

### **Program Advice**

Program Advice (CDMS@westernsydney.edu.au)

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (https://enquiry.westernsydney.edu.au/courseenquiry/)| Local Admission (https://www.westernsydney.edu.au/future/) | International Admission (https://www.westernsydney.edu.au/international/home/apply/admissions/) |

#### Location

Campus	Attendance	Mode	Advice
Parramatta Campus - Victoria Road	Full Time	Internal	See above
Parramatta Campus - Victoria Road	Part Time	Internal	See above

## Admission 2017 - 2022

Minimum admission requirements to this program are:

· A Bachelor qualification in any discipline

Or

 A Diploma in ICT/Computing/IS fields and five years full-time equivalent work experience in Information and Communications Technologies which includes experience in applying skills in: programming; networking; database design and development; systems analysis and design; and project management.

This program has three Pathways (A, B and C) that vary in length and structure based on previous study and work experience.

Pathway A - One and a half years

Students who have non-Computing, non-ICT or non-Information Systems with Bachelor qualifications are eligible to complete the one and a half year Pathway below.

Pathway B - One year

Students who have non-Computing, non-ICT or non-Information Systems with Honours or Masters qualifications are eligible to complete the one year Pathway below.

Pathway C - One year

Students who have Computing, ICT or Information Systems with Bachelor or Bachelor Honours or Masters qualifications are eligible to complete the one year Pathway below.

#### **Additional Information**

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://www.westernsydney.edu.au/content/dam/digital/pdf/Statement\_of\_Service.PDF)

#### Admission 2023

Applicants must have successfully completed:

An undergraduate degree or higher in any discipline OR

A Diploma in any discipline, plus five (5) years' full-time equivalent professional work experience in Information and Communications Technologies which includes experience in: programming, networking, database design and development, systems analysis and design and project management OR

A Diploma in ICT/Computing/IS fields plus two (2) years full-time equivalent work experience in Information and Communications Technologies which includes experience in: programming, networking, database design and development, systems analysis and design, and project management.

#### Additional Information

Applications from Australian and New Zealand citizens and holders of permanent resident visas may be made via the Universities Admissions Centre (UAC) or directly through the Western Portal. Use the links below to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

http://www.uac.edu.au/ https://westernsydney.uac.edu.au/ws/

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

http://www.uac.edu.au/

All other International applicants must apply directly to the University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

International Office (http://www.westernsydney.edu.au/international/)

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

## **Program Structure**

The program length and structure varies based on the student's previous study background and level, and work experience.

## **Pathway A Core subjects**

Subject	Title	Credit Points
INFO 7005	IT Project Management	10
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
INFO 7003	Advanced Topics in User System Interaction	10
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	: 10

Pathway A - And six subjects from Foundation or Specialised subject lists

## **Pathway B Core subjects**

Subject	Title	Credit Points
INFO 7005	IT Project Management	10
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
INFO 7003	Advanced Topics in User System Interaction	10
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10

Pathway B - And two subjects from Foundation or Specialised subject lists

## Pathway C Core subjects

Subject	Title	Credit Points
INFO 7005	IT Project Management	10
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10

**Pathway C** - And five subjects from Foundation or Specialised subject lists.

## Foundation subjects

Note: Subjects in this list may be included in the program structure as Core Subjects and cannot be selected as one of the list 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
ENGR 7017	Professional Practice and Communication	10
COMP 7015	Programming Proficiency	10
INFS 7008	Systems and Network Security	10
NATS 7057	Research Preparation in Post Graduate Studie	s 10

INFS 7007	Systems Analysis and Database Management Systems	10
INFS 7009	Web Technologies	10

## **Specialised Subjects**

Note: Subjects in this list may be included in the program structure as Core Subjects and cannot be selected as one of the list 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
INFO 7002	Advanced Topics in Artificial Intelligence	10
INFO 7014	Advanced Topics in Cybersecurity	10
INFS 7003	Advanced Topics in ICT	10
COMP 7002	Advanced Topics in Networking	10
INFO 7015	Applied Cybersecurity	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 7007	Information Security Management	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
COMP 7023	Predictive Analytics	10
COMP 7024	Programming for Data Science	10
MATH 7017	Probabilistic Graphical Models	10
COMP 7025	Social Media Intelligence	10
INFS 7006	Software Testing and Automation	10
MATH 1028	Statistical Decision Making	10
MATH 7016	The Nature of Data	10
COMP 7016	Visualisation	10
INFO 7013	Web Engineering	10
COMP 7017	Wireless Networking	10

## **Equivalent Subjects**

The subjects listed below count towards completion of the program for students who may have passed subjects in the list in 2020 or earlier.

INFO 7006 - Intelligent Agents for E-Markets, no longer offered. INFS 7010 - Workflow Management Systems, no longer offered. MECH 7004 - Advanced Mobile Robotics, no longer offered as part of this program.

 $\ensuremath{\mathsf{MECH}}$  7005 - Advanced Robotics, no longer offered as part of this program.

MATH 7007 - Genomic Data Science, no longer offered.

INFO 7008 - Modern Software Architectures, replaced by INFO 7018 Cloud Systems Development

ENGR 7018 - Research Preparation in Post Graduate Studies, replaced by NATS 7057 Research Preparation in Post Graduate Studies

The subjects listed below count towards completion of this program for students who passed these subjects in 2021 or earlier.

MATH 7011 Predictive Analytics, replaced by COMP 7023 Predictive Analytics

# **Recommended Sequence**

Students are categorised into three Pathways based on their previous study background and work experience as indicated below and program structure and length is set accordingly. See individual links for detailed program structure.

# Pathway A - One and a Half Years

Students who have been admitted with non-Computing, non-ICT or non-Information Systems with Bachelor Qualifications are eligible to complete the two year Pathway below.

Students must complete 120 credit points as follows.

## **Full-time start-year intake**

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
INFO 7003	Advanced Topics in User System Interaction	10
INFO 7005	IT Project Management	10
	Credit Points	40
Spring session		
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
Select two subjects lists.	from the Foundation or Specialised subject	20
	Credit Points	40
Year 2		
Autumn session		
Select four subjects lists.	from the Foundation or Specialised subject	40
	Credit Points	40
	Total Credit Points	120

## Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
	Credit Points	40
Autumn session		
INFO 7003	Advanced Topics in User System Interaction	10
INFO 7005	IT Project Management	10

Select two subjects from the Foundation or Specialised subject lists.	20
Credit Points	40
Year 2	
Spring session	
Select four subjects from the Foundation or Specialised subject lists.	40
Credit Points	40
Total Credit Points	120

# Pathway B - One Year

Students who have been admitted with non-Computing, non-ICT or non-Information Systems with Bachelor Honours or Masters Qualifications are eligible to complete the one and a half year Pathway below.

Students must complete 80 credit points as follows.

## Full-time start-year intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
INFO 7003	Advanced Topics in User System Interaction	10
INFO 7005	IT Project Management	10
	Credit Points	40
Spring session		
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
Select two subject	s from the Foundation or Specialised subject	20
lists.		
	Credit Points	40
	Total Credit Points	80

#### Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
	Credit Points	40
Autumn session		
INFO 7003	Advanced Topics in User System Interaction	10
INFO 7005	IT Project Management	10
Select two subject	cts from the Foundation or Specialised subject	20
lists.		
	Credit Points	40
	Total Credit Points	80

# Pathway C - One Year

Students who have been admitted with Computing, ICT or Information Systems with Bachelor or Bachelor Honours or Masters Qualifications are eligible to complete the one a half year Pathway below.

Students must complete 80 credit points as follows.

## Full-time start-year intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 7013	Network Technologies	10
INFO 7005	IT Project Management	10
ENGR 7017	Professional Practice and Communication	10
Select one subject flists.	from the Foundation or Specialised subject	10
	Credit Points	40
Spring session		
Select four subjects	from the Foundation or Specialised subject	40
lists.		
	Credit Points	40
	Total Credit Points	80

## Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 7013	Network Technologies	10
ENGR 7017	Professional Practice and Communication	10
INFO 7005	IT Project Management	10
Select one subject from the Foundation or Specialised subject lists.		10
	Credit Points	40
Autumn session		
Select four subjects lists.	from the Foundation or Specialised subject	40
	Credit Points	40
	Total Credit Points	80

# **Equivalent Subjects**

The subjects listed below count towards completion of the program for students who may have passed subjects in the list in 2020 or earlier.

The subjects listed below count towards completion of the program for students who may have passed subjects in the list in 2020 or earlier.

INFO 7006 - Intelligent Agents for E-Markets

INFS 7010 - Workflow Management Systems

MECH 7004 - Advanced Mobile Robotics

MECH 7005 - Advanced Robotics

MATH 7007 - Genomic Data Science

INFO 7008 - Modern Software Architectures

301041 - Service Oriented Architecture

ENGR 7018 - Research Preparation in Post Graduate Studies, replaced by NATS 7057 Research Preparation in Post Graduate Studies

Qualification for this award requires the successful completion of 80 credit points as per the recommended sequence below.

### **Full-time start-vear intake**

	. ,	
Course	Title	Credit Points
Year 1		
Autumn session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
INFO 7003	Advanced Topics in User System Interaction	10
ENGR 7017	Professional Practice and Communication	10
	Credit Points	40
Spring session		
INFO 6001	IT Project Management	10
COMP 7013	Network Technologies	10
Select two subject	cts from the Alternate subjects pool.	20
	Credit Points	40
	Total Credit Points	80

## **Full-time mid-year intake**

Course	Title	Credit Points
Year 1		
Spring session		
COMP 7015	Programming Proficiency	10
INFS 7007	Systems Analysis and Database Management Systems	10
ENGR 7017	Professional Practice and Communication	10
INFO 6001	IT Project Management	10
	Credit Points	40
Autumn session		
COMP 7013	Network Technologies	10
INFO 7003	Advanced Topics in User System Interaction	10
Select two subjects from the Alternate subjects pool.		20
	Credit Points	40
	Total Credit Points	80

## **Alternate Subjects**

Subjects in this list may be included in the program structure as Core Subjects and cannot be selected as one of the list 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
INFO 7002	Advanced Topics in Artificial Intelligence	10
INFO 7014	Advanced Topics in Cybersecurity	10
INFS 7003	Advanced Topics in ICT	10
COMP 7002	Advanced Topics in Networking	10

INFO 7015	Applied Cybersecurity	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
INFS 7004	Content Management Systems and Web Analytics	10
COMP 7006	Data Science	10
COMP 7007	Information Security Management	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
INFO 7016	Postgraduate Project A	10
COMP 7023	Predictive Analytics	10
COMP 7024	Programming for Data Science	10
MATH 7017	Probabilistic Graphical Models	10
NATS 7057	Research Preparation in Post Graduate Studies	10
HUMN 4001	Researcher Development 1: Reading ,Writing, and the Business of Research	10
COMP 7025	Social Media Intelligence	10
INFS 7006	Software Testing and Automation	10
INFS 7008	Systems and Network Security	10
MATH 7016	The Nature of Data	10
COMP 7016	Visualisation	10
INFO 7013	Web Engineering	10
INFS 7009	Web Technologies	10
COMP 7017	Wireless Networking	10