

ICT120

# Computer Networks

School: School of Science, Technology and Engineering

2026 | Trimester 2

UniSC Sunshine Coast  
UniSC Moreton Bay  
UniSC Adelaide

BLEND  
ED  
LEARNING

Most of your course is on campus but you may be able to do some components of this course online.

Online

ONLINE

You can do this course without coming onto campus, unless your program has specified a mandatory onsite requirement.

*Please go to [unisc.edu.au](http://unisc.edu.au) for up to date information on the teaching sessions and campuses where this course is usually offered.*

## 1. What is this course about?

### 1.1. Description

Internet, the network of computers worldwide, has become an indispensable part of almost every business, school, and home. This course guides you to explore the fundamental technologies and solutions in network applications, hardware components, architectures, communication protocols, industrial standards, and system management. You will understand how networks, as small as an in-home local area network or as big as the Internet, are built and how they work to enable information sharing and communications across devices. You will also gain hands-on experience in network simulations and traffic analysis which will help you utilise the learned knowledge into real-world practices.

### 1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
<b>BLEND ED LEARNING</b>			
<b>Learning materials</b> – Asynchronous Learning Materials	1hr	Week 1	12 times
<b>Tutorial/Workshop 1</b> – In-class tutorial	2hrs	Week 1	12 times
<b>Seminar</b> – Common Session	1hr	Week 1	Once Only
<b>ONLINE</b>			
<b>Learning materials</b> – Asynchronous Learning Materials	1hr	Week 1	12 times
<b>Tutorial/Workshop 1</b> – Interactive Zoom tutorial	2hrs	Week 1	12 times
<b>Seminar</b> – Common Session	1hr	Week 1	Once Only

### 1.3. Course Topics

Introduction to Computer Networks.  
Network Hardware Essentials.  
Network Topologies and Technologies.  
Network Media.  
Network Protocols.  
IP Addressing.  
Network Reference Models and Standards.  
Network Hardware in Depth.  
Introduction to Network Security.  
Wide Area Networking and Cloud Computing.  
Network Management and Administration.  
Troubleshooting and Support.

## 2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first full-time study year of an undergraduate program.

## 3. What is the unit value of this course?

12 units

## 4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Implement the foundation concepts of networks.	Knowledgeable Empowered
2 Explain fundamental networking concepts.	Empowered
3 Apply networking concepts to solve a business problem.	Creative and critical thinker
4 Demonstrate knowledge and uses of new areas of networking.	Knowledgeable Creative and critical thinker

## 5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of "pre-requisites, co-requisites and anti-requisites".

### 5.1. Pre-requisites

Not applicable

### 5.2. Co-requisites

Not applicable

### 5.3. Anti-requisites

Not applicable

### 5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

### 5.5. Microcredential Information

Not applicable

## 6. How am I going to be assessed?

### 6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

### 6.2. Details of early feedback on progress

case studies discussed in the tutorial provide early feedback.

### 6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Quiz/zes	Individual	20%	One-hour	Week 5	Online Test (Quiz)
All	2	Report	Individual	40%	weeks 6-10	Week 10	Online Assignment Submission with plagiarism check
All	3	Examination - Centrally Scheduled	Individual	40%	one hour	Exam Period	Online Assignment Submission with plagiarism check

#### All - Assessment Task 1: Mid-trimester test

<b>GOAL:</b>	To demonstrate knowledge of foundation concepts of computer networks.		
<b>PRODUCT:</b>	Quiz/zes		
<b>AUTHORSHIP STATEMENT:</b>			
<b>FORMAT:</b>	This is an individual assessment that covers the first 4 weeks of content. Further details will be available on Canvas in the assignment specification.		
<b>CRITERIA:</b>	<b>No.</b>		<b>Learning Outcome assessed</b>
	1	Comprehension and knowledge of foundation concepts of computer networks.	2 4
<b>GENERIC SKILLS:</b>	Applying technologies		

### All - Assessment Task 2: Technical report

<b>GOAL:</b>	To demonstrate your ability to design and implement networking solutions according to business needs.		
<b>PRODUCT:</b>	Report		
<b>AUTHORSHIP STATEMENT:</b>			
<b>FORMAT:</b>	This is an individual assessment. A technical report (between 1500 to 2500 words) explaining the networking solution for a specified business case study. Further details will be available on Canvas in the assignment specification.		
<b>CRITERIA:</b>	<b>No.</b>		<b>Learning Outcome assessed</b>
	1	Critical analysis of an organisation's networking requirements Application of the networking concepts to the business problem Justification of developed network solution Written communication skills	1 3 4
<b>GENERIC SKILLS:</b>	Communication, Applying technologies		

### All - Assessment Task 3: Final examination

<b>GOAL:</b>	To demonstrate your knowledge and understanding of computer networks.		
<b>PRODUCT:</b>	Examination - Centrally Scheduled		
<b>AUTHORSHIP STATEMENT:</b>			
<b>FORMAT:</b>	This is an individual assessment		
<b>CRITERIA:</b>	<b>No.</b>		<b>Learning Outcome assessed</b>
	1	Application and communication of definitions and concepts used in networking design Discussion of the position of networking design in organisations Definition of a business problem and presentation of a networking solution to solve the problem	1 2 4
<b>GENERIC SKILLS:</b>	Applying technologies		

## 7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

## 8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

### 8.1. Prescribed text(s) or course reader

You need regular access to the resource(s) below. Many texts are available as ebooks through the [Library](#) at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Required	Greg Tomsho	2025	Guide to Networking Essentials	9	Cengage Learning

## 8.2. Specific requirements

Not applicable

## 9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

## 10. What administrative information is relevant to this course?

### 10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

### 10.2. Assessment: Additional Requirements

#### **Eligibility for Supplementary Assessment**

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

### 10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

- Less than 15 minutes: No penalty
- From 15 minutes to 30 minutes: 20% penalty
- More than 30 minutes: 100% penalty

### 10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

### 10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

## 10.6. General Enquiries

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- [UniSC Student Central](#)
- [UniSC Adelaide Student Central](#)