Subject learning guide

CSE1ITX Information Technology Fundamentals

2022

Subject details

General details					
Subject code	CSE1ITX	Subject title	Information Technology Fundamental		
Teaching period	Refer to schedule	Locations(s)			
Credit points	15	Mode	Online	Level	Year Level 1 - UG

Enrolment requirements	
Prerequisites	None
Co-requisites	None
Assumed skills and knowledge	None
Special study requirements	None

Subject description

This subject provides a general introduction to the breadth of the field of information technology. Areas covered include the main components and operation of IT devices, data storage and retrieval, computer networks, programming and website development.

Subject Intended Learning Outcomes (SILOs)

Upon successful completion of this subject, you should be able to:

1. Compare and advise on hardware and operating system resources based on organisational requirements
2. Interpret and report on the purpose and operation of organisational networks
3. Design and construct web pages with HTML and style sheets
4. Compare and advise on methods of storing and analysing data based on organisational requirements
5. Determine and discuss the suitability of programming solutions based on organisational requirements

Graduate Capabilities

The following Graduate Capabilities (GCs) are evaluated in this subject:

Domain Description	Element
Not evaluated	
Not evaluated	
Not evaluated	
Not evaluated	

Essentials

Information about La Trobe's three Essentials can be found here:
Essentials, Education Services, La Trobe University

The following Essentials will be evaluated in this subject:

Essentials	How assessed (if applicable)
Global Citizenship	Not evaluated
Innovation and Entrepreneurship	Not evaluated
Sustainability Thinking	Not evaluated

Weekly Schedule		
Week	**Topic**	**Due**
1	**Welcome Lecture & Topic Lecture** Information technology landscape. Learning Portal content - Subject Overview and Topic: *Charting your IT career* **Live Welcome Lecture - Question and Answer**	
2	**Topic Lecture** Computer hardware Learning Portal content – Topic: *Computer hardware* **Live Lecture Assessment 1 Hardware and software Overview**	
3	**Topic Lecture** Computer software *Learning Portal content – Topic: Computer software*	
4	**Topic Lecture** Web basics *Learning Portal content – Topic: Web basics*	
5	**Topic Lecture** HTML5 Essentials *Learning Portal content – Topic:* **Live Lecture Assessment 2 Website Development Overview**	Assessment 1 Hardware and Software report
6	**Topic Lecture** **CSS essentials** *Learning Portal content – Topic: Web basics*	
7	**Topic Lecture** Computer networks *Learning Portal content – Topic: Computer networks*	
8	**Topic Lecture** Databases *Learning Portal content – Topic: Databases*	Assessment 2 Website development
9	**Topic Lecture** Introduction to computer programming Learning Portal content – Topic: *Introduction to computer* programming	
10	**Topic Lecture** Computer programming basics Learning Portal content – Topic: *Computer programming basics* **Live Lecture Assessment 4 Programming and Databases Overview**	Assessment 3 Computer network report
11	**Topic Lecture** Data structures and algorithms Learning Portal content – Topic: Data structure and algorithms	
12	**Topic Lecture** Cloud computing Learning Portal content – Topic: Revision	Assessment 4 Programming and databases report

Assessment and feedback summary

Assessment task	Due date	%	Comments
Assessment 1: Report on hardware and operating systems (equivalent to 1000 words)	Refer to calendar	25%	Part A - A report to analyse and justify the hardware and software needs of a business. Part B - A written report on operating systems
Assessment 2: Website development activity (equivalent to1200 words)	Refer to calendar	30%	Activity for developing a website for a business.
Assessment 3: Network Operation Report (equivalent to 500 words)	Refer to calendar	15%	A report on the operation of networks to satisfy the business requirements of an organisation
Assessment 4: Report on programming and databases (equivalent to 1200 words)	Refer to calendar	30%	Students will develop a report and discuss the suitability of programming solutions based on organisational requirements

Learning resources

Reading type	Title	Author and year	Publisher
Multimedia	Information Technology Fundamentals	Didasko Digital, 2019	Didasko

Academic integrity

Academic integrity means being honest in academic work and taking responsibility for learning the conventions of scholarship. La Trobe University views this seriously as evidenced by the following extract:

> *Academic honesty is a fundamental principle in teaching, learning, research and scholarship. The University requires its academic staff and students to observe the highest ethical standards in all aspects of academic work and it demonstrates its commitment to these values by awarding due credit for honestly conducted scholarly work, and by penalising academic misconduct and all forms of cheating.*
>
> *Academic Integrity Procedures (2010, p. 1 of 6)*

Academic misconduct

Academic misconduct includes poor referencing, plagiarism, copying and cheating. You should familiarise yourself with your responsibilities in relation to Academic Integrity and if you have any questions, direct them to your Course Coordinator. Information can be found on the website at:
www.latrobe.edu.au/students/academic-integrity

Assessment overview

Key points to remember

- All assessments must be submitted electronically through the learning portal.
- Late submissions incur a penalty of 5% of the final assignment mark per day.
- If you have encountered difficulties that lead to late submission or no submission, you should apply for special consideration.
- The due dates for each assessment are listed in the calendar.
- All tasks are located under the 'Assess' tab at the bottom of the screen.

Drafts

- A draft may be submitted for major assessment tasks, i.e. those worth 20% or more (excluding tests and exams). One draft submission only per assessment task.
- The purpose of a draft is to provide high-level feedback, guidance and support in delivering against key assignment objectives/criteria.
- While some attention to academic expression, referencing practice and general presentation may be offered, the draft facility does not allow for review of prospective plagiarism or academic misconduct.
- When reviewing your draft, your lecturer will assume you have complied with La Trobe policies on academic misconduct and understand the seriousness of plagiarism.
- If you have not already reviewed the Referencing Essentials guide (to help guard against plagiarism and academic misconduct) please do so prior to draft submission. It can be found under the 'Getting started' tab on the learning portal.
- Help with assessment structure, language and referencing can be gained through Studiosity. Click on this link for access https://www.latrobe.edu.au/mylatrobe/studiosity-free-online-assignment-help-and-live-chat-for-la-trobe-students/
- The 'Live assessment workshop' session will provide further details on how drafts will be managed for this subject.
- Drafts must be submitted no later than one week prior to the Assessment Due Date unless advised differently by your Lecturer.

Assessment 1

Report on hardware and software

This is an INDIVIDUAL assignment. Students are not permitted to work in a group.

Assessment type:	Report
Word count:	1000
Task weighting:	25%

This assessment is based on a practical scenario. Listed points will be assessed throughout the assessment.

- Your knowledge and understanding of computer hardware components and software.
- Identify hardware and software compatibility.
- Recommend hardware and software for the given business requirements.

Assessment 2

Website development

This is an INDIVIDUAL assignment. Students are not permitted to work in a group.

Assessment type:	Activity
Word count:	equivalent to 1200
Task weighting:	30%

For this assessment, you're required to develop a website for a business. The website must meet a range of technical, visual and functional requirements, as outlined fully in the task.

Your website should be designed to suit its target audience and meet the target audiences' purpose of the site. It should have links to a minimum of six pages, contain a contact form and be developed using a minimum of HTML and CSS. The final product should be viewable on browsers such as Mozilla Firefox, Google Chrome and Internet Explorer.

Assessment 3

Report on computer networks

This is an INDIVIDUAL assignment. Students are not permitted to work in a group.

Assessment type:	Report
Word count:	Equivalent to 500
Task weighting:	15%

Write a report on operation of networks to satisfy business requirements of an organisation. Listed points will be assessed throughout the assessment.

- Your knowledge and understanding of computer networks components.
- Recommend computer network solution for the given business requirements.

Assessment 4

Report on Programming and Databases

This is an INDIVIDUAL assignment. Students are not permitted to work in a group.

Assessment type:	Report
Word count:	equivalent to 1200
Task weighting:	30%

Write a report on the programming and database requirements for a given situation. Listed points will be assessed throughout the assessment.

- Your knowledge and understanding of computer programming languages and their principles.
- Your knowledge and understanding of databases.
- Recommend an appropriate programming language and database for the given situation.