



In Pursuit of Excellence

STUDENT MODULE GUIDE

SOS36W0/01/2025

SOFTWARE SUPPORT II

Faculty of Engineering, Built Environment & Information Technology

IMPORTANT INFORMATION

NB: The purpose of this document is to provide you with the necessary guidelines for the successful completion of this module in terms of the theoretical and the practical aspects of its teaching, its learning, and its assessment. This document also contains relevant information on the administration of this module including the rules of engagement on your communication with your peers as well as with the Department's staff.



Excellence In Teaching & Learning

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1. Introduction & Welcome

On behalf of Walter Sisulu University, the Faculty of Engineering, Built Environment and Information Technology, we would like to welcome you to the Information Technology programme and specially to Software Support II. Computing skills play an increasingly vital role in almost all occupations, and contribute to productivity gains, innovation and employment growth across all South African and international industries. This is leading to exciting career opportunities. Many new jobs have been created in the past decade and the long-term career prospects continue to strengthen. The academic focus of the department is to offer programmes specifically aimed at preparing students for the workplace by offering training that will enable diplomates and graduates to demonstrate competence, knowledge and judgment in addressing discipline related problems.

Please consult the department handbook for a description of the different specialisations and information about all of the courses offered by the Information Technology Department. The prospectus will also show you how the courses must be combined in order to follow a particular specialisation from your second year of study.

Software Support II is one of the four compulsory subjects that must be completed in the third year of the Diploma in ICT in Support Services. It is an exciting and stimulating course which introduces learners to the field of operating systems concepts as it relates to an IT support service management practices. On successful completion of the course, learners will be able to apply the techniques learnt and construct creative solutions to thought-provoking problems in the management of IT service practices that align with the needs of the business. Learners should know how to apply concepts learned in class, to their everyday life by being hands-on and current.

The purpose of this Student Module Guide is to provide you with written guidelines as to what to expect of the University and what the University in turn expects of you, with regard to this course. In Section 6, you are given administrative details of the Department as well as the contact details of the lecturers teaching this course at different delivery sites. The general course information shows you the number of lecture, practical and tutorial periods a week and provides information about additional time you will be expected to spend on course-related work. The responsibilities of the students with regard to participation and attendance are stated and an overview is provided of the learning and teaching approach. Comprehensive assessment details for the course are given in this document as well as details of the materials that will be used, e.g. textbooks, LMS. In Section 2, full technical details of the purpose of the qualification, course entry requirements and NQF level, assessment criteria and moderation are provided. In Section 14, the modules and specific outcomes are shown and the work schedule provides a detailed work plan for the year.

2. Module Purpose & Outcomes

2.1 Module Purpose

Software Support II is designed to equip learners with a solid understanding of the main components of operating systems and how to perform critical tasks like managing software and supporting the end users. The course provides an introduction to the management of IT services and a thorough demonstration of the service management framework. Learners are made aware of the deeper understanding of various operating systems concepts. Learners will learn various practices in supporting the end users and optimizing the organization's server.

Software Support II is one of the four compulsory subjects that must be completed in the third year of the Diploma: IT Support Services stream. The contents of this course are supplemented by the contents of the other compulsory subjects in year 3 of this specialization.

2.2 Module Learning Outcomes & Assessment Criteria

Module Learning Outcomes The successful student will be able to:	Module Assessment Criteria
1. Explain the various users, main components and concepts of various operating systems used in an enterprise.	1.1 Various operating system (Windows, Linux and Mac OS) concepts are explained. 1.2 Various types of operating systems and user types are explained. 1.3 The manipulation and navigation of the operating system using GUI, CLI and Linux shell is illustrated.
2. Install various file systems and kernels for Windows and Linux OS respectively for enterprise use.	2.1 The file system mount, unmount, partition and format functions is explained. 2.2 Various OS are installed.
3. Configure and administer operating systems for end-user and server software management in an enterprise.	3.1 Various storage tools for different OS are configured and managed. 3.2 System users and groups, using GUI, CLI and Linux shell is administered. 3.3 Different virtualization concepts are explained.
4. Maintain and manage both the OS and application software using GUI, CLI and Linux shell.	4.1 The working of various software installs and devices under different operating systems is explained.

	<p>4.2 The sharing of resources and working with different accounts is illustrated.</p> <p>4.3 Maintain and manage both the OS and application software using GUI, CLI and Linux shell.</p>
5. Troubleshoot common issues in a system support specialist role in an enterprise.	<p>5.1 Various troubleshooting tools to solve processes and resources problems are evaluated.</p> <p>5.2 The start and termination of processes in different OS is illustrated.</p> <p>5.3 Remote deployment of OS is discussed.</p>
6. Explain the role of cloud computing in software support for enterprise environments.	<p>6.1 The role of cloud computing in software support is explained.</p> <p>6.2 The following service concepts relating to cloud computing (Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS)) are explained.</p>

2.3 Module NQF Level

6

2.4 Pre – and Co-requisites

None

2.5 Module Credits

30 credits

2.6 Notional Hours Required

300 hours

3. Qualification & Programme Information

3.1 Qualification Rules

Articulation rules from the programme prospectus – co and pre-requisites.

Each diploma programme (all specialisations) is a 360 credit qualification. In order to graduate, a student needs to pass each of the compulsory modules shown in the prospectus for the qualification. The Year 1 courses are common across all qualifications and a pass in each is required in order to graduate.

In order to complete this module (Software Support II), you will be required to first complete System Software 1. Work Integrated Learning is applicable to this module and it will be detailed further by the lecturer.

3.2 Qualification Title

Diploma in Information and Communication Technology in Support Services (W60015)

Diploma in Information and Communication Technology in Support Services (W60016)

3.3 Qualification NQF level

6

3.4 Qualification Total credits

360

4 Mode of Delivery

This module is presented Face-to-Face and technology in-fused. In other words, it is facilitated both face-to-face and with technology (such as WSU Learning Management System, smartboards etc). In order to access the Moodle platform (commonly referred to as WiSeUp), follow the instructions below:

1. URL Address – WiSeUp.wsu.ac.za
2. Enter password and username when prompted.
3. Navigate the landing page to reach this module.

Formal Contact Time – attendance at all classes is compulsory

Theory	5 x 45 minute periods per week
Practical (lecturer-led lab)	2 x 45 minute periods per week

Face-to-face (classroom/lab) delivery

The Theory and Practical component(if applicable) will be delivered on campus in classroom/lab.

According to University Policy all lectures must be attended punctually and regularly. All students will be allocated to a group and will be given a time table of the weekly theory and practical sessions(if applicable) they must attend. Evidence of homework OR assignment preparation is expected for entry to our class.

Participation is an important part of the class sessions. Participation means both attendance and engagement. Learners are expected to attend and fully participate in all the scheduled classes, group learning opportunities, discussion sessions and practical sessions. In addition, punctuality is important. Learners are expected to be on time and ready to begin at the stated time on the timetable.

Learners who are not able to attend a formal contact session must provide the lecturer with a written note explaining their non-attendance. These notes will be kept in the course file in case queries regarding a student's poor performance are raised.

Non-Contact Time

Students are expected to spend at least 5 hours a week completing work outside of the formal contact time and attending PAL sessions. This will be in the form of doing homework or assignment and preparation for the next sessions as well as making use of the online learning platform.

5 Contact with the Lecturers, Department and Faculty

5.1 Communication with Lecturers

Name	Delivery Site	Office No.	Telephone / Email	Consultation Times
Mr R Ngandu (BCC)	Potsdam		043 401 6246 rngandu@wsu.ac.za	To be advised

5.2 Contacting the Department

Designation	Name	Delivery Site	Office No.	Telephone Email / Fax
Head of Department (BCC)	Mr J Okuthe	Potsdam		043 709 4047 jokuthe@wsu.ac.za
Administrator	Ms L Mazwi	Potsdam		043 7085422 lmazwi@wsu.ac.za

5.3 Contacting the Faculty

Designation	Name	Delivery Site	Office No.	Telephone Email / Fax
Executive Dean	Prof W.D. Thwala	Chiselhurst		043 7094069 wthwala@wsu.ac.za
Secretary	Ms B Panyaza	Chiselhurst		043 7094069 bpanyaza@wsu.ac.za

6 Resources

6.1 Study Material

All students are provided with course material through WiSeUp. Visit: WiSeUp.wsu.ac.za

6.2 Prescribed and Recommended Material

Prescribed Textbook:

1. Tomsho, G. 2020. Guide to Operating Systems (MindTap Course List), 6th Edition, ISBN-10: 0357433831, ISBN-13: 978-0357433836. Cengage Learning.
2. Halsey, M. 2024. The IT Support Handbook: A How-To Guide to Providing Effective Help and Support to IT Users, Second Edition, ISBN-13: 979-8868803840. Apress.

Other useful references:

1. Beginning Ubuntu Linux, 5th edition, Emilio Raggi, Keir Thomas.
2. Comptia A+ Guide to IT Technical Support, 9th edition, Jean Andrews and Jill West.
3. Tomsho, G. (2016). Guide to Operating Systems. 5th Edition, Cengage Learning; 5th edition, ISBN-10 : 1305107640, ISBN-13 : 978-1305107649.
4. Halsey, M. (2019). The IT Support Handbook (A How-To Guide to Providing Effective Help and Support to IT Users). Apress, ISBN-10 : 1484251326, ISBN-13 : 978-1484251324.

Some useful web sites (valid as at 01/02/2020)

General: <http://www.google.co.za> <http://en.wikipedia.org> <http://dictionary.reference.com>

Google courses: <https://learndigital.withgoogle.com/digitalskills/courses>

CISCO courses: <https://www.netacad.com/courses/all-courses>

<https://www.netacad.com/careers/pathways-and-certifications>

IBM courses: <https://www.ibm.com/services/learning/ites.wss/za-en?pageType=page&c=a0014719>

MICROSOFT courses: <https://www.microsoft.com/en-us/learning/training.aspx>

<https://www.edx.org/school/microsoft>

6.3 Electronic Resources / Material

All course notes, slides etc. will be posted on the WiSeUp Learner Management System. Important communication about group work, assignments, tests, quizzes will also be posted online and shared on the class WhatsApp groups.

6.4 Other Resources

Click or tap here to enter text.

6.5 Accessing the Library

Learners can refer to the general prospectus for the Library detail

7 Student Support Services

The university through the Teaching and Learning Directorate provides student support services. For more information about available support services students could visit the University website and get more information about available support services.

7.1 Student Counseling

The University is committed to providing students with a holistic learning experience, through the Department of Student Affairs which manages student enquiries, complaints, and student life in general on a daily basis. Using the services of dedicated and competent staff, the Department of Student Affairs provides students with relevant training and support within the areas of counselling, health, personal development and more. The Department strives to create and sustain a vibrant and well-resourced learning environment in which respectful relationships are established. Contact details of the Department of Student Affairs are as follows:

Designation	Name	Campus	Office No.	Telephone / Email / Fax

Students can refer to section 13 of the general prospectus for further details

7.2 Tutor & PAL Services

Click or tap here to enter text.

8 Lecture Room Expectations

According to university policy all face-to-face and online classes must be attended punctually and regularly. Formal Contact Time – attendance at all classes is compulsory

Theory:	4 x 45 minute periods per week
Practical (lecturer-led lab):	3 x 45 minute periods per week

The department has adopted the following attendance policy:

- a. if a student does not attend 80% of classes between tests, the next test will not be marked - meaning the student will be awarded 0% for the next test.
- b. if a student does not attend 80% of classes during the year, the student will not be admitted to the fourth and supplementary tests.

Registers will be taken at all classes and filed for future reference.

Students who are not able to attend a formal contact session must provide the lecturer with a written note explaining their non-attendance and, if applicable, a medical certificate, within 5 working days. These notes will be kept in the course file to check student attendance.

Students are also expected to spend an additional minimum of 5 hours a week completing homework exercises, revising, preparing for classes and tests, and participating in WiseUp online activities such as group discussions. Research has shown that attending to these tasks together with classmates is generally of great benefit to all students.

Misunderstandings about course content or failure to understand a topic can often be cleared up in one-on-one sessions with the lecturer and students are urged to consult their lecturers if they have any queries, etc. It is also important for a lecturer to be aware of any personal problems which may affect a student's performance. If necessary, the lecturer will be able to direct the student to the many support services offered by the University, such as Student Counselling Services, Health Services, HIV/Aids Support Services, etc.

Students are requested to make appointments to meet with lecturers during the available consultation times. As this will not always be possible, however, lecturers are also expected to make time to meet with students in 'emergency' situations.

Lecturers are expected to attend all scheduled contact classes. If possible, notice will be given if a lecturer cannot attend a class and arrangements will be made by the lecturer to cover the work missed.

Students are advised to check the department notice board, WiSeUp announcements or with their class reps daily for any information pertaining to their course, classes, etc.

9 Rules for Online Engagement (Netiquette)

The University has adopted a learner-centred approach to teaching and learning. Consequently, teaching and assessment strategies endeavour to be learner-centred, interactive and applicable to the future career towards which this programme of study is directed.

The online learner system Moodle is used to supplement the study time.

The following set of rules are meant to guide our online engagement:

1. Every learner has to logon to the learning platform so as to get trace of presence through the register.
2. Learners are encouraged to participate actively throughout learning, questions can be asked through raising of hands on the platform.
3. Learners are encouraged to logon to the portal east least 2 minutes before the start of each class.
4. Videos of each online lesson shall be made available, but it is highly advisable that learners attend live sessions so as to ask questions.
5. Always mute your microphone and only unmute it when asked to do so or when making a contribution.
6. Video mode shall be kept off all the times to ensure quality of audio during lessons.
7. Never interject a speaker without following due procedures.

Non-Contact Time including eLearning / Moodle

Students are expected to spend at least 5 hours a week completing work outside of the formal contact time and attending PAL sessions. This will be in the form of doing homework and preparation for the next sessions as well as making use of the university online learning platform which is called WiSeUp.

All students are automatically given access to WiSeUp which runs on a smartphone, tablet and any laptop/desktop. All course material is available online as well as additional resources.

The purpose of WiseUp is to supplement student studies and lecturer engagement.

The University is continuously reviewing its teaching and learning methods. E-learning is a learning model that incorporates/blends IT solutions into traditional teaching and learning methods. WiSeUp on-line is the institution's E-learning tool. Academic staff and students are encouraged to adopt the use of WiSeUp in managing their course delivery. The on-line tool can be accessed at: <http://WiSeUp.wsu.ac.za>, login credentials and tutorials on how to use WiSeUp on-line will be provided on each delivery site by E-learning specialists.

Class Representatives and Complaint Procedures

It is university policy that each class should elect two class representatives at the beginning of each year. One of the roles of the class representatives is to convey information from the lecturer/department to other students. The class representatives will also be called upon to represent the learners in meetings with Department staff and/or management.

The correct procedure for any learner who has a complaint about a lecturer or course is for the learner firstly to approach the lecturer and attempt to resolve the issue. If this is unsuccessful, the learner should complete a student complaint form (available from the secretary) and take the issue to the Site Head of Department. If the matter is still not resolved it may be escalated to the Head of Department. If many learners in a class have a problem with a lecturer or course, the problem must be detailed on a student complaint form and the form should be passed to the class representatives who should act on behalf of the learners by first approaching the lecturer and then, if necessary, escalating the problem to the Site HOD and then the HOD.

Roles Responsibilities and Attendance Requirements

According to University Policy all lectures must be attended punctually and regularly. Attendance at all
According to university policy all lectures and practical classes must be attended punctually and regularly.

The department has adopted the following attendance policy:

- a. if a student does not attend 80% of classes between tests, the next test will not be marked - meaning the student will be awarded 0% for the next test.

b. if a student does not attend 80% of classes during the year, the student will not be admitted to the fourth and supplementary tests.

Registers will be taken at all classes and filed for future reference.

Students who are not able to attend a formal contact session must provide the lecturer with a written note explaining their non-attendance and, if applicable, a medical certificate, within 5 working days. These notes will be kept in the course file to check student attendance.

(See 1.8 below for details regarding the submission of medical certificates for missed tests).

As stated in 1.4 above, learners are also expected to spend an additional minimum of 5 hours a week (if assisted by the PAL programme) completing homework exercises, revising work completed and preparing for classes and tests. Research has shown that attending to these tasks together with class mates is generally of great benefit to all learners.

Peer Assisted Learning programme (PAL) co-ordinated by the WSU Centre for Learning and Teaching Development (CLTD) is run for the benefit of all learners – more especially those who are struggling with the course content. Learners are expected to attend as many PAL sessions per week as possible. Registers will be taken at all PAL sessions and filed for future reference.

Misunderstandings about course content or failure to understand a topic can often be cleared up in one-on-one sessions with the lecturer and learners are urged to consult their lecturers if they have any queries, etc. It is also important for a lecturer to be aware of any personal problems which may affect a learner's performance. If necessary, the lecturer will be able to direct the learner to the many support services offered by the University, such as Student Counselling Services, Health Services, HIV/Aids Support Services, etc.

Learners are requested to make appointments to meet with lecturers during the available consultation times. As this will not always be possible, however, lecturers are also expected to make time to meet with learners in 'emergency' situations.

Lecturers are expected to attend all scheduled contact classes. If possible, notice will be given if a lecturer cannot attend a class and arrangements will be made by the lecturer to cover the work missed.

Learners are advised to check the department notice board on a daily basis for any information pertaining to their course, classes, etc.

10 Formative Assessment

This type of assessment will be used to inform both the student and the lecturer and will not be allocated a mark. It will be used to allow the student and lecturer to monitor his/her progress in achieving the course goals and specific outcomes. It will take the form of self-review, peer review and lecturer review, online quizzes, etc. and should be seen by the student as a valuable learning aid. It will also be used to provide valuable feedback to the lecturer regarding his/her instruction techniques, topics that require revision or additional attention, etc. Students will be asked to provide comprehensive evaluations of the course and lecturer at least once during the course cycle.

10.1 Assessment Plan

Assessment Number	Type of Assessment	Due Date
1	Quiz	End of each chapter
2	Group Presentation	End of each unit
3	Blogging / Reflection	End of each unit

11 Summative Assessment

This type of assessment is used to formally measure the learning of skills, knowledge and understanding. Network Software Support II is a year course - in which the examination evaluation system is used for summative assessment. There will be 3 (three) internally moderated tests during the year, each of which will be assigned a weighting as shown below:

Assessment Number	Type of Assessment	Weighting (%)	Due Date
1	Test	15	End of term 1
2	Test	20	End of term 2
3	Group project	30	End of term 3

4	Practical Test	35	End of term 4
TOTAL		100%	

NOTE: students may not miss more than one of the first 3 assessments.

11.1 Examination Requirements

11.1.1 DP Requirements

All summative assessments will count towards the Duly Performed (DP) mark (also called year mark).

The DP mark for Software Support III will be calculated from summative tests (three tests proposed) and possibly from assignments or projects at weightings as in section 11.1.2.

11.1.2 Mark Calculation for Examinable Modules

Software Support II is a year course - in which the examinable evaluation system is used for summative assessment. NB: All summative assessments will count towards the Duly Performed (DP) mark (also called year mark). All summative tests will be administered in an INVIGILATED environment ON CAMPUS – whether the assessments are online in a lab or on paper in a classroom.

There will be 3 (three) main assessments and project during the year, each of which will be assigned a weighting as shown below:

ASSESSMENT 1 15%

ASSESSMENT 2 20%

PROJECT 30%

ASSESSMENT 3 35%

There will be one examination, at the end of the year.

According to University policy, entrance into the examination is subject to a minimum DP mark of 40%.

The minimum mark required to pass an examination is 40%. If a learner scores below 40% in the examination, he/she does not qualify for a final mark and does not pass the course.

Final Mark (before supplementary examination)

The Final Mark is calculated as follows: DP (Tests, Presentations, Assignments, Practicals)	40%
EXAMINATION	60%
Total:	100%

A learner must score at least 50% for the final mark (calculation is shown above) in order to pass the course. Re-mark requests, absence from examination due to illness, special examinations, etc. See General Prospectus for rules pertaining to these.

NOTE: Medical certificates regarding missed assessments and/or assignments, etc. must be submitted to the lecturer or admin assistant or department secretary within 5 working days of the test date or due date. Medical certificates not received within 5 days will not be considered – unless the student was hospitalised.

Students will generally not be permitted to submit more than one medical certificate for a formal assessment.

If such a case arises, a special arrangement must be negotiated with the lecturer and HOD.

Complaints or queries about assessment marks must be raised with the lecturer concerned within 5 days of the assessment being returned to the students.

SUPPLEMENTARY ASSESSMENT

There will be one supplementary examination for students whose Final Mark is less than 50% and main examination mark is greater than or equal to 40%. If a learner scores below 40% in the supplementary examination, he/she does not pass the course.

Final Mark (after supplementary examination)

The Final Mark is calculated as follows: DP (Tests, Presentations, Assignments, Practicals)	40%
SUPPLEMENTARY EXAMINATION	60%
Total:	100%

A learner must score at least 50% for the final mark (calculation is shown above) in order to pass the course. Re-mark requests, absence from examination due to illness, special examinations, etc. See General Prospectus for rules pertaining to these.

11.1.3 Examination Period

3 hours

11.1.4 Examination Paper & Admission to the Examination

There will be one examination, one, at the end of the year.

According to University policy, entrance into the examination is subject to a minimum DP mark of 40%.

The minimum mark required to pass an examination is 40%. If a learner scores below 40% in the examination, he/she does not qualify for a final mark and does not pass the course.

11.1.5 Marking of Examination Papers

Examiners will mark all submitted scripts collected from the Examinations Department. Moderation of scripts will be conducted by an approved external moderator.

11.2 Missed Assessments

Medical certificates regarding missed tests and/or assignments, etc. must be submitted to the lecturer or admin assistant or department secretary within 5 working days of the test date or due date. Medical certificates not received within 5 days will not be considered – unless the student was hospitalised. Students will generally not be permitted to submit more than one medical certificate for a formal test. If such a case arises, a special arrangement must be negotiated with the lecturer and HOD.

11.3 Assessment Criteria

Each summative assessment during the year will assess how well the student has achieved the outcomes of specific Units. Students will be told which Units (and outcomes) will be included prior to the assessment. The fourth test and the final make-up test will assess how well the student has achieved the exit level outcomes of the course and the specific outcomes of all the Units.

11.4 Moderation

All summative assessment question papers and memoranda for System Support 2 are internally moderated during the year.

12 Assessments: Semester 1 – 1st Semester Compulsory Assessments

12.1 Assessment 01 – Semester 1

This assessment is identified as assessment number one on the table in section 10.1.

12.1.1 Instructions & Due Date

The due date of this assessment is indicated on the table in section 10.1 and more instructions will timeously be communicated.

12.1.2 Assessment Questions

The questions for this assessment will timeously be communicated. The scope is as per scheme of work in section 15.

12.2 Assessment 02 – Semester 1

This assessment is identified as assessment number two on the table in section 10.1

12.2.1 Instructions & Due Date

The due date of this assessment is indicated on the table in section 10.1 and more instructions will timeously be communicated.

12.2.2 Assessment Questions

The questions for this assessment will timeously be communicated. The scope is as per scheme of work in section 15.

13 Assessments: Semester 2 – Second Semester Compulsory Assessments

13.1 Assessment 01 – Semester 2

This assessment is identified as assessment number three (Project) on the table in section 10.1.

13.1.1 Instructions & Due Date

The due date of this assessment is indicated on the table in section 10.1 and more instructions will timeously be communicated.

13.1.2 Assessment Questions

The questions for this assessment will timeously be communicated. The scope is as per scheme of work in section 15.

13.2 Assessment 02 – Semester 2

This assessment is identified as assessment number four on the table in section 10.1.

13.2.1 Instructions & Due Date

The due date of this assessment is indicated on the table in section 10.1 and more instructions will timeously be communicated.

13.2.2 Assessment Questions

The questions for this assessment will timeously be communicated. The scope is as per scheme of work in section 15.

14 Module Content

14.1 Learning Unit 1: Operating Systems Fundamental Concepts

14.1.1 Key Concepts

Multiuser, Single-user, Multitasking, BIOS

14.1.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
Explain the various users, main components and concepts of various operating systems used in an enterprise.	1.1 Various operating system (Windows, Linux and Mac OS) concepts are explained. 1.2 Various types of operating systems and user types are explained. 1.3 The manipulation and navigation of the operating system using GUI, CLI and Linux shell is illustrated.

14.2 Learning Unit 2: Operating Systems Installation and File Systems

14.2.1 Key Concepts

Kernel, FAT, FAT32, Partitioning

14.2.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
Install various file systems and kernels for Windows and Linux OS respectively for enterprise use.	2.1 The file system mount, unmount, partition and format functions is explained. 2.2 Various OS are installed.

14.3 Learning Unit 3: Users Configuration, Administration and System Virtualization

14.3.1 Key Concepts

Remote connection, Command prompt, System Admin

14.3.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
Configure and administer operating systems for end-user and server software management in an enterprise.	3.1 Various storage tools for different OS are configured and managed. 3.2 System users and groups, using GUI, CLI and Linux shell is administered. 3.3 Different virtualization concepts are explained.

14.4 Learning Unit 4: Package and Software Management

14.4.1 Key Concepts

Package Dependencies, Underneath the Hood, Devices and Drivers

14.4.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
Maintain and manage both the OS and application software using GUI, CLI and Linux shell.	4.1 The working of various software installs and devices under different operating systems is explained. 4.2 The sharing of resources and working with different accounts is illustrated. 4.3 Maintain and manage both the OS and application software using GUI, CLI and Linux shell.

14.5 Learning Unit 5: Operating Systems in Practice and Process Management

14.5.1 Key Concepts

Process Creation and Termination, Resource Monitoring, System Monitoring

14.5.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
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Troubleshoot common issues in a system support specialist role in an enterprise.	<p>5.1 Various troubleshooting tools to solve processes and resources problems are evaluated.</p> <p>5.2 The start and termination of processes in different OS is illustrated.</p> <p>5.3 Remote deployment of OS is discussed.</p>
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14.6 Learning Unit 6: Cloud Computing Fundamentals

14.6.1 Key Concepts

Rack-mounted computers, SaaS, PaaS, IaaS, Private vs. Public cloud

14.6.2 Learning Outcomes and Assessment Criteria

Learning Outcomes	Assessment Criteria
Explain the role of cloud computing in software support for enterprise environments.	<p>6.1 The role of cloud computing in software support is explained.</p> <p>6.2 The following service concepts relating to cloud computing (Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS)) are explained.</p>

15 Scheme of Work (Module Timetable)

WK	UNIT TOPIC	LEARNING & TEACHING STRATEGIES (METHODS)	LECTURE/ TUTORIAL ACTIVITY
01 10/02	INTRODUCTION TO CLASS, LECTURER, LEARNER GUIDE, ETC.		LECTURE
02 17/02	UNIT 1: OPERATING SYSTEMS FUNDAMENTAL CONCEPTS		LECTURE
03 24/02	UNIT 1: OPERATING SYSTEMS FUNDAMENTAL CONCEPTS		LECTURE
04 03/03	UNIT 1: OPERATING SYSTEMS FUNDAMENTAL CONCEPTS		LECTURE

05 10/03	UNIT 1: OPERATING SYSTEMS FUNDAMENTAL CONCEPTS		LECTURE
06 17/03	ASSESSMENT WEEK (PROPOSED)	TEST 1	LECTURE
07 24/03	UNIT 2: OPERATING SYSTEMS INSTALLATION AND FILE TERM 1 ENDS ON 28 MARCH 2025		LECTURE
	TERM 2		
09 07/04	UNIT 2: OPERATING SYSTEMS INSTALLATION AND FILE		LECTURE
10 14/04	UNIT 2: OPERATING SYSTEMS INSTALLATION AND FILE		LECTURE
11 21/04	UNIT 3: USERS CONFIGURATION, ADMINISTRATION AND SYSTEM VIRTUALIZATION		LECTURE
12 28/04	UNIT 3: USERS CONFIGURATION, ADMINISTRATION AND SYSTEM VIRTUALIZATION		LECTURE
13 05/05	UNIT 3: USERS CONFIGURATION, ADMINISTRATION AND SYSTEM VIRTUALIZATION		LECTURE
14 12/05	UNIT 3: USERS CONFIGURATION, ADMINISTRATION AND SYSTEM VIRTUALIZATION		LECTURE
15 19/05	UNIT 4: PACKAGE AND SOFTWARE MANAGEMENT		LECTURE
16 26/05	UNIT 4: PACKAGE AND SOFTWARE MANAGEMENT		LECTURE
17 02/06	UNIT 4: PACKAGE AND SOFTWARE MANAGEMENT		LECTURE
18 09/06	ASSESSMENT WEEK (PROPOSED)	TEST 2	
19 16/06	UNIT 4: PACKAGE AND SOFTWARE MANAGEMENT TERM 2 ENDS ON 20 JUNE 2025		LECTURE
	TERM 3		

24 21/07	UNIT 5: OPERATING SYSTEMS IN PRACTICE AND PROCESS MANAGEMENT		LECTURE
25 28/07	UNIT 5: OPERATING SYSTEMS IN PRACTICE AND PROCESS MANAGEMENT		LECTURE
26 04/08	UNIT 5: OPERATING SYSTEMS IN PRACTICE AND PROCESS MANAGEMENT		LECTURE
27 11/08	UNIT 5: OPERATING SYSTEMS IN PRACTICE AND PROCESS MANAGEMENT		LECTURE
28 18/08	ASSESSMENT WEEK (PROPOSED)	PROJECT PORTFOLIO ASSESSMENT	
29 25/08	UNIT 6: ENTERPRISE CLOUD COMPUTING TERM 3 ENDS ON 29 AUGUST 2025		
	TERM 4		
31 08/09	UNIT 6: ENTERPRISE CLOUD COMPUTING		LECTURE
32 15/09	UNIT 6: ENTERPRISE CLOUD COMPUTING		LECTURE
33 22/09	UNIT 6: ENTERPRISE CLOUD COMPUTING		LECTURE
34 29/09	ASSESSMENT WEEK (PROPOSED)	TEST 3	
35 06/10	UNIT 6: ENTERPRISE CLOUD COMPUTING		
36 13/10	LECTURES END ON 17 OCTOBER 2025 PUBLICATION OF DP'S ON 17 OCTOBER 2025		

37 20/10	STUDY WEEK BEGINS ON 20 OCTOBER 2025 STUDY WEEK ENDS ON 24 OCTOBER 2025		
38 27/10	EXAMS BEGIN ON 24 OCTOBER 2025		
42 10/11	EXAMS END ON 14 NOVEMBER 2025		
48 24/11	PUBLICATION OF SEMESTER 1 STANDARD EXAMINATIONS RESULTS ON 26 NOVEMBER 2025		
49 01/12	SUPPLEMENTARY EXAMS COMMENCE ON 04 DECEMBER 2025		
50 08/12	SUPPLEMENTARY EXAMS END ON 09 DECEMBER 2025 18/12 TERM ENDS AND UNIVERSITY CLOSES		

16 Notes on Plagiarism

No student shall obtain or attempt to obtain an assessment through cheating or other improper means. Any such attempt shall be deemed to be in contravention of the University's anti-plagiarism policy.

Students who submit work which has not been adequately referenced but who have clearly used information from textbooks, research articles, newspapers, magazines and internet pages will be held to be in breach of the plagiarism and copyright act which is a criminal offence. Plagiarised work will not be accepted for marking. Learners found guilty of academic dishonesty will receive a zero and in some cases the disciplinary rules of the Department and or University may be applied.