Module Guide: Computer Applications Technology (CAT) – Grade 10

1. Module Overview

This module is designed to introduce Grade 10 learners to foundational knowledge and skills in Computer Applications Technology (CAT), in alignment with the South African **CAPS curriculum**. The focus is on developing essential digital competencies through interactive, ICT-integrated learning experiences.

This module aims to equip learners with the ability to use computers for communication, information processing, and productivity in academic and real-life contexts. It supports differentiated learning by incorporating a range of teaching aids and technology tools to accommodate varied learning styles and levels of digital literacy.

- **Subject**: Computer Applications Technology
- **Grade**: 10
- **Duration**: 10 months
- **Delivery Mode**: Blended learning (classroom and online components)
- **Design Frameworks**: ADDIE + Backward Design

Lecturer

Dr. M Phore is the lecturer for the "Computer Application Technology Grade 10" course. His academic journey is deeply rooted in the University of Johannesburg, where he pursued his education from his undergraduate (2017) studies through to the completion of his Doctor of Philosophy (PhD, 2023), research on "Robotics and AI in Education". This extended period of study at a single institution suggests a strong connection to the university and a commitment to its academic values.

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2. Topics Covered (From CAPS Document)

The following Grade 10 CAT topics are included in this module:

1. **Systems Technologies**
   - Introduction to computers, hardware, software, and file management
   - Basic troubleshooting and keyboarding skills

2. **Solution Development**
   - Word processing: document editing, formatting, tables, and templates
   - Spreadsheets: data types, formatting, calculations, graphs
   - Presentations: layout, text, multimedia integration, and animations

3. **Internet Technologies**
   - Browsers, search engines, web addresses, and website types
   - Introduction to uploading, downloading, and browsing techniques

4. **Electronic Communication**
   - Email structure, etiquette (netiquette), attachments, and e-communication tools

5. **Social Implications**
   - ICT in everyday life, ethics, security, ergonomics, green computing

6. **Information Management**
   - Data vs information, gathering, processing, and presenting insights using Word and Excel

3. General Learning Outcomes

At the end of this module, learners will be able to:

1. Demonstrate basic proficiency in using word processors, spreadsheets, and presentation software.
2. Understand and explain the fundamental components and functions of computer systems.
3. Use the internet effectively for research, communication, and collaboration.
4. Apply safe and ethical practices when using digital tools and platforms.
5. Create structured, visually appealing documents and presentations.
6. Manage and present information responsibly to solve defined problems or tasks.

4. Assessment Breakdown

Assessment Task	Type	Marks
Practical Test 1: Word Processing	Formative	40
Theory Test 1: Systems & Social Aspects	Formative	30
Online Quiz: Internet & Communication	Formative	20
Summative Task: Document Integration	Summative	60
Summative Task: Spreadsheet Calculations	Summative	50

PAT (Information Management Project)	Summative (PAT)	100	

Total: 300

Weighting for Reporting:
- Classwork & Tests: 25%
- Practical Tasks & Projects: 50%
- PAT (Practical Assessment Task): 25%

5. Resources and Materials

- **Hardware**: One computer per learner with internet access
- **Software**: Microsoft Office, typing tutor, antivirus, email client
- **Teacher Aids:** CAPS-aligned lesson plans, task rubrics, and exemplar documents
The prescribed textbooks are on the LMS.

6. Teaching and Learning Approach

- Active learning through real-life tasks and digital creation
- Scaffolded instruction for progression from basic to complex skills
- Formative feedback through quizzes, typing drills, and peer reviews
- Integration of theory and practice using relevant case studies and applications