



2023/24 ANNUAL TEACHING PLANS: INFORMATION TECHNOLOGY: GRADE 10 (TERM 1)

TERM 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10
CAPS TOPIC	Basic concepts of computing (2 hours)	Basic concepts of computing (4 hours)	Data representation and storage (4 hours)	Algorithms (4 hours)	Algorithms (4 hours)	Data representation (2 hours) Solution development (2 hours)	Solution development (4 hours)	Solution development (4 hours)	Social implications (2 hours) Solution development (2 hours)	Solution development (2 hours)
CONCEPTS, SKILLS AND VALUES	<ul style="list-style-type: none"> - Explain what a computer is + logging in - Basic usage - Basic risks + impact - Folder creation 	<ul style="list-style-type: none"> - What are digital technologies? - Define information technology - Overview of a general model of a computer - Overview and concepts of the main components of a computer system: - Overview of types of computers (purpose and uses) - Overview of data and information - What is an ICT system? 	<ul style="list-style-type: none"> - Overview and link between data, information, and knowledge - Overview of number systems - Conversion between number systems 	<ul style="list-style-type: none"> - Basic concepts of an algorithm - Basic IPO table & flow charts 	<ul style="list-style-type: none"> - Examples of algorithms that need to be developed - Produce an algorithm to solve a problem - Trace an algorithm to determine the outcome – trace table - Compare algorithms in terms of sequence, precision and efficiency 	<ul style="list-style-type: none"> - Overview of digital character representation (ASCII, Unicode) - Overview of data types and their storage - Overview of data structures and collections of data storage 	Introduction to output, input, variables, operators	Introduction to retrieving remainders, comparison operators and performing logical comparisons, functions, basic calculations, basic conditional constructs	<ul style="list-style-type: none"> - Software licence agreements, piracy, copyright, copyleft - Digital divide - Basic string concatenation - Economic reasons using computers - Social, ethical, and legal issues pertaining to ICTs? 	<ul style="list-style-type: none"> - Introduction to components (input, output) - Casting - Formatting of output (fixed, currency) - Event handling (click)
DATE COMPLETED [COMPLETED BY TEACHER]										
TERM COVERAGE %	7.5%	22.5%	32.5%	42.5%	52.5%	62.5%	72.5%	82.5%	92.5%	100%
YEAR COVERAGE: 40%	2.1%	6.3%	9.1%	11.9%	14.7%	17.5%	20.3%	23,1%	25.9%	28%
PRE-KNOWLEDGE	None									
INFORMAL ASSESS, REMEDIATION	1 informal assessment task	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	1 informal assessment task	2 informal assessment tasks	2 informal assessment tasks	1 informal assessment task
SBA (FORMAL ASSESSMENT)							Task 1: THEORY TEST: Min. 45 marks (1hr)			

2023/24 ANNUAL TEACHING PLANS: INFORMATION TECHNOLOGY: GRADE 10 (TERM 2)

TERM 2	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10-11	WEEK 10-11
CAPS TOPIC	Systems technologies (2 hours)	Software engineering principles (2 hours) Solution development (2 hours)	Solution development (2 hours)	Solution development (4 hours)	Systems technologies (4 hours)	Solution development (4 hours)	Solution development (4 hours)	Communication technologies (4 hours)	Social implications (4 hours)	Software engineering principles (4 hours)	Software engineering principles (4 hours)
CONCEPTS, SKILLS, AND VALUES	<ul style="list-style-type: none"> Extend hardware concepts (input, output, storage, input + output, system unit, ports and connectors and categorising primary memory vs secondary memory Compare input, processing, output, storage devices of a desktop computer with a small mobile device 	<ul style="list-style-type: none"> What is problem solving? Problem solving steps Comparison operators and performing logical comparisons: conditional constructs (if and if-then-else) 	Nested if's (three levels in the nesting)	CASE statement Extend the use of variables, relational operators (and or not, IN)	<ul style="list-style-type: none"> Describe system software Extend system software concepts Utility programs Device drivers 	String comparisons (basics)	<ul style="list-style-type: none"> Basic validation techniques (input and processing Events – form create activate Debugging techniques Debugging using trace tables 	<ul style="list-style-type: none"> Describe a network Reasons for using networks Advantages and disadvantages of networks List the essential basic network components: nodes, NIC, communication media, switch, router, NOS Overview of different communication media PAN, HAN, LAN, WLAN, WAN Internet as a WAN Differentiate between client-server and peer-to-peer networks Describe electronic communication Overview of applications, tools to facilitate e-communication – purpose and uses E-mail as a form of e-communication 	<ul style="list-style-type: none"> Ergonomics, green computing issues, health issues E-communication in terms of accuracy, time, distance, communication costs, speed How to use e-mail (best practices) <p>What is problem solving? Problem solving steps</p>	Apply problem solving techniques	<ul style="list-style-type: none"> Apply problem solving techniques Use appropriate tools and techniques used in software analysis
DATE COMPLETED [COMPLETED BY TEACHER]											
TERM COVERAGE %	5%	17.5%	22.5%	32.5%	42.5%	52.5%	62.5%	72.5%	82.5%	92.5%	100%
YEAR COVERAGE: 72%	29.4%	32.9%	34.3%	37.1%	39.9%	42.7%	45.5%	48.3%	51.1%	53.9%	56%
PRE-KNOWLEDGE	Gr 10 Term 1 theory and programming skills and knowledge										
INFORMAL ASSESS, REMEDIATION	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	1 informal assessment task	2 informal assessment tasks	2 informal assessment tasks	1 informal assessment task	1 informal assessment task	1 informal assessment task
SBA (FORMAL ASSESSMENT)						Task 2: PRACTICAL TEST: Min. 45 marks (1hr)					Task 3: Mid-year examination

2023/24 ANNUAL TEACHING PLANS: INFORMATION TECHNOLOGY: GRADE 10 (TERM 3)

TERM 3	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9-11	WEEK 9-11	WEEK 9-11
CAPS TOPIC	Internet technologies (2 hours)	Internet technologies (1 hour) Solution development (3 hours)	Solution development (4 hours)	Solution development (4 hours)	Computer management (2 hours) PAT (2 hours)	Solution development (4 hours)	Solution development (2 hours) PAT (2 hours)	Solution development (2 hours) PAT (2 hours)	Social implications (2 hours) PAT (2 hours)	Solution development (2 hours) PAT (2 hours)	Application development (2 hours) PAT (2 hours)
CONCEPTS, SKILLS AND VALUES	<ul style="list-style-type: none"> Overview of the internet What is needed to connect to the internet Overview of the world wide web (www) 	Browsing and searching Iteration – Loops: For-loop – structure	Iteration – loops: <ul style="list-style-type: none"> For-loop – structure While-loop – structure 	Iteration – loops: <ul style="list-style-type: none"> While-loop – structure Repeat until – structure 	<ul style="list-style-type: none"> Describe computer management Overview and purpose of various management tasks and operating system utilities General housekeeping tasks PAT: Task description and analysis of requirements	String handling from first principles	<ul style="list-style-type: none"> Apply string methods to string handling Implement algorithms to solve computing problems PAT: Task definition and user story	<ul style="list-style-type: none"> Develop simple applications incorporating Concepts covered Make use of a timer object for simple animations PAT: Acceptance tests	<ul style="list-style-type: none"> Fake news E-mail threats and issues Safe email and internet use Responsible communication styles and netiquette Online threats POPIA PAT: Navigation, flow between screens	Develop simple applications incorporating concepts covered PAT: Design a screen	Develop simple applications incorporating concepts covered PAT: IPO, data and validation
DATE COMPLETED [COMPLETED BY TEACHER]											
TERM COVERAGE %	10%	20%	30%	37.5%	47.5%	57.5%	67.5%	77.5%	87.5%	97.5%	100%
YEAR COVERAGE: 72%	58.8%	61.6%	64.4%	66.5%	69.3%	72.1%	74.9%	77.7%	80.5%	83.3%	84%
PRE-KNOWLEDGE	Grade 10 Term 1 and Term 2 theory and programming skills and knowledge										
INFORMAL ASSESS, REMEDIATION	2 informal assessment tasks	2 informal assessment tasks			2 informal assessment tasks	1 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	2 informal assessment tasks	PAT	PAT
SBA (FORMAL ASSESSMENT)					PAT: Start Task 0	Task 4: THEORY TEST Min 45 marks (1hr)	PAT: Task 1	PAT: Task 2	Task 5: Practical test Min 45 marks (1hr) PAT: Task 3	PAT: Task 4	PAT: Task 5

2023/24 ANNUAL TEACHING PLANS: INFORMATION TECHNOLOGY: GRADE 10 (TERM 4)

TERM 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7-10
CAPS TOPIC	Internet technologies (1 hours) PAT (3 hours)	Solution development (2 hours) PAT (2 hours)	Application development (2 hours) PAT (2 hours)	Application development (2 hours) PAT (2 hours)	Solution development (1 hours) PAT (3 hour)	Solution development (4 hours)	Assessment (2 x 2 ½ hours)
CONCEPTS, SKILLS AND VALUES	What are Internet services technologies? PAT: Create screen 1 PAT: Create screen 2	Develop simple applications PAT: Develop the code PAT Input & output using text file (for PAT only)	Develop simple applications PAT: Testing and data validation	Consolidate and reinforce content, concepts, and skills PAT: Documentation	Consolidate and reinforce content, concepts, and skills PAT: Hand in	Consolidate and reinforce content, concepts, and skills	
DATE COMPLETED [COMPLETED BY TEACHER]							
TERM COVERAGE %	16.7%	33.4%	50.1%	66.8%	83.5%	100%	
YEAR COVERAGE %	86.7%	89.5%	92.3%	95.1%	97.9%	100%	
PRE-KNOWLEDGE	Grade 10 Term 1-3 theory and programming skills and knowledge						
INFORMAL ASSESS, REMEDIATION	1 informal assessment task	1 informal assessment task	1 informal assessment task	1 Informal assessment task	1 Informal assessment task	1 Informal assessment task	
SBA (FORMAL ASSESSMENT)	PAT: Task 6 & 7	PAT: Task 8	PAT: Task 9	PAT: Task 10	PAT: Hand in		TASK 6: FINAL EXAMINATION Theory examination & practical
TEACHING TIME PER WEEK	4 hours per week required <ul style="list-style-type: none"> If contact time is lost a recovery plan must be in place Your recovery plan and remediation plan must be reflected in your Subject Improvement Plan – update it throughout the year Indicate on the teaching plan (ATP) what has been completed to track your progress Application packages share common features (formatting, editing, page layout, illustrations, etc.) reinforced these when teaching different packages Use the guideline documents to complete PAT 						
RESOURCES (OTHER THAN TEXTBOOK) TO ENHANCE LEARNING	Hardware <ul style="list-style-type: none"> Data projector 1 learner per computer Entry-level computers networked Multifunction printer Internet connectivity 		Software <ul style="list-style-type: none"> Windows 10 or later version Delphi programming software (Version 10,10.3,10.4) Office 2016 or later version (Word, Excel, Access, PowerPoint) 		Maintenance plan		General <ul style="list-style-type: none"> Slide presentations – summarised content Notebook for summaries and activities Online content, resources Video clips Posters with new concepts, formulas, functions Previous question papers
EXAMPLES OF FORMATIVE ASSESSMENTS, RETRIEVAL PRACTICE	<ul style="list-style-type: none"> Concept maps for summaries Brainstorm sessions Quizzes (Google Forms, MS Forms, Kahoots!, etc.) for retrieval practice 				<ul style="list-style-type: none"> Competitions, gaming (fun activities) Peer-assessment Extended opportunities, activities, etc. 		
IMPORTANT DOCUMENTS TO USE WITH THE ATP	<ul style="list-style-type: none"> Updated Grade 10 CAPS for 2023 with updated IT Gr 10 content Chapter 4 – latest assessment instructions Gr 12 exam guidelines with new concepts (new technologies where applicable) 						