ST. MARY'S COLLEGE
FORM U6
SUBJECT- COMPUTER SCIENCE
Course Outline
Term 1

Proposed Date/Week	Unit/Section	Topic	Modules
Wk 1-4	**Operating Systems and Computer Networks**	Operating Systems	:01 - Introduction to Operating Systems :02 - The BIOS :03 - The Boot Process :04 - Job Control Languages :05 - Process Management :06 - Pipelining :07 - Multitasking :08 - Scheduling Algorithms :09 - Memory Management :10 - Language Translators :11 - Summary of Key Terms
Wk 5-6	**Software Engineering**	The Systems Development Life Cycle	:01 - Phases of SDLC :02 - Life Cycle Models :03 - Analysis Phase - Tools and Techniques :04 - DFD Example :05 - Design Phase - Tools and Techniques :06 - Guidelines for Interface Design :07 - Development and Testing of The New System :08 - Program Testing :09 - Program Implementation :10 – Issues Confronting Modern Computer Systems *Intellectual Property* *Shareware and Freeware* *Privacy* *Data Protection* *Computer Misuse* *Threats*

| Wk 7-10 | **Operating Systems and Computer Networks** | Computer Networks | :01 - Distributed Systems
:02 - Ads & Disads of Distributed Systems
:03 - Types of Networks
   -LAN
   -WAN
   -MAN
   -VPN
:04 - Network Topologies
   -STAR
   -BUS
   -RING
   -TREE
   -MESH
:05 - Network Terminology Explained
:06 - Ethernet
:07 - Token Ring
:08 - FDDI
:09 - VPNs
:10 - Communications Media
:11 - Summary of Broadband Technologies
:12 - The OSI Model
:13 - VOIP & Cellular Networks
:14 - Data Strategies for Large Scale Systems (Flat Files vs SQL) |
| **Wk 11-12** | First Draft of Internal Assessment Due | | |

Term 2

Proposed Date/Week	Unit/Section	Topic	Modules
Wk 1-2	**Data Structures**	Abstract Data Types	:01 - Arrays :02 - Linear Lists :03 - Queues :04 - Stacks
Wk 3-4		Sorting and Searching Algorithms	:01 - Bubble Sort :02 - Insertion Sort :03 - Selection Sort :04 - Heap Sort :05 - Linear Search :06 - Binary Search
Wk 5-10	Internal Assessment Work Revision and Past Papers **Final Internal Assessment Due – Carnival Friday**		

Term 3

CAPE EXAMINATIONS