CLASS   : **MYP 3** - GRADE 8 BILINGUAL
TEACHER   : **EVANGELOS C. ZIOULAS**

WORKBOOK : **Computer Science** A, B, C Middle School
                (written by: Arapoglou, Mavoglou, Oikonomakos, Fitros)

VCZ

CURRICULUM

UNIT 1	UNDERSTANDING COMPUTER ARCHITECTURE
Chapters **1,2**	Analog & digital systems (bits & bytes) Numerical systems (binary system, calculations, conversions) Characters representation (ASCII - Unicode) Computer architecture (Power Supply, Motherboard, CPU, RAM, ROM, expansion cards, ports, connectors) Creating 3D presentations with **Prezi** Remote Presentations and Sharing with Prezi *Project 1st Semester*
UNIT 2	**APPLICATIONS DEVELOPMENT**
	Introduction to Programming with **Scratch** (Desktop & Online Version) Creating Digital Games, Animation and Quizzes with Scratch Input - Output Commands Logic and Loops Procedural Programming (Subprograms) *Project 1st or 2nd Semester*
UNIT 3	**STEM (Science – Technology – Engineering – Math)**
	Understanding Motherboard **Raspberry Pi** The Operating System **Raspbian** (GNU/Linux) Creating Circuits (Wiring, Sensors, LED's, Resistors, Buzzers, Buttons) Programming Motherboard (**Scratch** Programming Environment)
UNIT 4	**PROGRAMMING IN LOGO-LIKE ENVIRONMENT**
	Introduction to Turtle's Geometry (logo-like interface) The **PENCIL code** Programming Environment Creating Graphics with PENCIL Code Input and Output Commands Logic and Loops Creating Functions *Project 2nd Semester*