

CLASS : **MYP 4 - GRADE 9 BILINGUAL**  
 TEACHER : **EVANGELOS C. ZIOULAS**  
 WORKBOOK : **Computer Science A, B, C GYMNASIUM**  
 (written by: Arapoglou, Mavoglou, Oikonomakos, Fitros)



## CURRICULUM

UNIT 1	INTRODUCTION TO ALGORITHMS
<b>Chapter 1</b>	The problem concepts The algorithm concept (definition and examples) Algorithmic features, Representation modes of an algorithm Programming languages (historical evolution) The programming environment (stages of a program execution)
UNIT 2	INTRODUCTION TO PROGRAMMING WITH LOGO
<b>Chapter 2</b>	Introduction to <b>MicroWorlds EX</b> programming environment Basic commands of <b>Logo</b> in MicroWorlds EX Input & Output commands The loop structure (repeat) Design of geometrical shapes with Logo
UNIT 3	PROCEDURAL PROGRAMMING
<b>Chapter 2</b>	Using variables in <b>Logo</b> The assignment command (make) Procedural Programming (Creating procedures in Logo) Logical expressions (Simple & Complex conditions) Operators AND, OR and NOT (Table of truth) The logic structures (if and If else)  <p style="text-align: center;"><i>Project of 1<sup>st</sup> semester</i></p>
UNIT 4	PROGRAMMING WITH PYTHON
	<b>Python IDLE</b> Programming Environment Introduction to <b>Python</b> Programming Language Input and Output Commands Variables and Calculations Logic and Loops Processing Strings Tuples, Lists and Dictionaries Procedural Programming, Functions Python Modules The turtle Module (Turtle's Geometry)  <p style="text-align: center;"><i>Project of 2<sup>nd</sup> semester</i></p>