



2nd Edition

Code Hero

COURSE SYLLABUS



CodeHero - 2nd Edition

1) Introduction of Computational Sciences online course (8 hours)

a) How Computer Work

- i. Binary Data
- ii. Circuits and Logic
- iii. Central Processing Unit
- iv. Memory
- v. Input and Output

b) Computer Networks

- i. Local Area Networks
- ii. Circuit Switching
- iii. Message Switching
- iv. The Internet
- v. Packet Switching
- vi. Packet Routing
- vii. The World Wide Web



2) Introduction to programming using Javascript (1 mês)

a) Introduction

- i. Development environment
- ii. Console
- iii. Statements
- iv. Commons
- v. Numbers
- vi. Values and Expressions
- vii. Arithmetic operators
- viii. Variables
- ix. Assignment operators
- x. Math methods
- xi. Strings
- xii. String methods

b) Conditionals

- i. Booleans
- ii. Comparison operators
- iii. Logical operators
- iv. Ternary operator
- v. If statements
- vi. If-Else statements
- vii. Else-if statements
- viii. Switch statements



c) Loops

- i. While Loops
- ii. Break statement
- iii. For loop

d) Data Types and Arrays

- i. Arrays
- ii. Array methods
- iii. Data Types

e) Functions

- i. Functions
- ii. Function parameters
- iii. Return values
- iv. Function scope
- v. Functions as arguments

f) Objects

- i. Objects
- ii. Methods
- iii. Combining Objects and Arrays