



FUNDAMENTALS OF PROGRAMMING IN C#

COURSE OVERVIEW

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- Provide programming concepts using C# (C Sharp) language as the vehicle
- At the end of the course, the student will
 - Appreciate the need for programming
 - Understand the concept of structured programming and apply them in practice
 - Be able to write programs using C# constructs
 - Write application programs for various business situations
 - Sufficiently prepared for later courses, such as:
 - Object Oriented Programming with C#
 - .NET: Enterprise Development with .NET Visual Studio and C#

- Introduction to Programming Constructs
- Structured Approach to Programming using C#
- String Handling
- Indexed Variables: Arrays
- Modular Programming: Functions and Subprograms

- To attend this course, the student should have
 - Basic computer knowledge in Windows environment
 - Some familiarity with command line interface
 - Ability to use text editing software
 - Good reasoning and logical ability



Tentative Schedule

Day	Topic
Day 1	Intro to Programming Introduction to C# Using Visual Studio Creating Initial Program
Day 2	Variables Operators Conditionals
Day 3	Loops String Manipulations
Day 4	String Manipulations Arrays
Day 5	Functions and Submodule
Day 6	Revision – Q&A



Typical Schedule for each day

- Quiz
 - To practice on how to solve programming problem without doing trial and error
- Short revision
 - You can nominate some of the problem to be discussed in class
- Lecture
 - Not very long
- Workshop and Practice
 - Solve programming problems related to the lectures given
 - More time to accommodate those from non-IT background
 - Opportunity to ask questions from your instructor and your peers



What things doesn't work

- Ask your classmates
 - It's recommended to have a study group throughout your course in this programme.
 - Your classmate may be able to explain it better
- Ask your instructor
- Why should you help your peers?
 - You may also need help in the future from them
 - It helps you to strengthen your understanding
 - May not need to study for the exam



Grading Matter

- 25% of the grade for Term 1 technical subjects. (25 out of 100)
 - This will be examined in the exam
 - You will need to write code on paper
 - Minor syntax errors will not be penalized
 - Missing semicolon, non-matching braces or parentheses and so on.



References

- C# Programming Guide
 - <https://msdn.microsoft.com/en-sg/library/67ef8sbd.aspx>
- C# Fundamentals: Development for Absolute Beginners
 - <https://channel9.msdn.com/Series/C-Sharp-Fundamentals-Development-for-Absolute-Beginners>