



Lecture Zero

# Course Information

© **Dr. Mohammad Mahfuzul Islam, PEng**  
Professor, Dept. of CSE, BUET

# Course Teacher & Class Time

- Course Teacher

**Part A**  
**(C++ and Java)**  
(7 Weeks)

**Dr. Mohammad Mahfuzul Islam, PEng**

Professor, CSE, BUET

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**Part B (Java)**  
(7 Weeks)

**Dr. Rifat Shahriyar**

Professor, CSE, BUET

- Class Time Table

Section A		
Day	Time	Room#
Sat	9am~10 am	107
Sun	11am~12 am	
Wed	10am~11 am	

Section B		
Day	Time	Room#
Sat	11am~12pm	108
Sun	10am~11am	
Wed	9am~10am	

	Section C	
Day	Time	Room#
Sat	10am~11am	109
Sun	9am~10am	
Wed	11am~12pm	



# Start Up

## Course Materials:

Visit regularly for course materials <https://cse.buet.ac.bd/moodle/course/view.php?id=108>

## Prescribed Textbook for C++:

- Herbert Schildt, Teach Yourself C++, McGraw Hill, 3<sup>rd</sup> Edition.
- Robert Lafore and Waite Group, Object Oriented Programming in C++, Sams Publishing, 4<sup>th</sup> Edition.
- Herbert Schildt, The Complete Reference C++, McGraw Hill, 4<sup>th</sup> Edition.

## Prescribed Textbook for Java:

- Herbert Schildt, Java The Complete Reference, McGraw Hill, 12<sup>th</sup> Edition.
- Paul Deitel and Harvey Deitel, Java How to Program, Prentice Hall, 11<sup>th</sup> Edition.

# Learning Schedule for Part A

Week	Lecture#	Topic to Learn	Programming Language
Week 1	1 ~ 3	Basic Features of OOP	Both <b>C++</b> & <b>Java</b>
Week 2	4 ~ 6	Encapsulation – Data Hiding	
Week 3	7 ~ 9	Polymorphism	
Week 4	10 ~ 12	Inheritance	
Week 5	13 ~ 15	Exception Handling	
Week 6	16 ~ 18	Input - Output	
Week 7	19 ~ 21	Generic Class – STL & Collections	

**Tight Schedule!**

**Vacation means Extra-Class !!**

# Marks Distribution

## Distribution of Overall Marks:

Scope	Marks	Percentage
Attendance	30	10%
Class Test	90	30%
Final	210	70%
Total		100%

**Be sincere about attendance!!**

**Don't miss classes intentionally assuming that you will continue the remaining classes or your application will be granted.**

## Distribution of Attendance Marks:

Range of Attendance	Percentage	Marks
90% or Above	10%	30
85% to <90%	9%	27
80% to <85%	8%	24
75% to <80%	7%	21
70% to <75%	6%	18
65% to <70%	5%	15
60% to <65%	4%	12

# Plagiarism

**Plagiarism means using someone else's words or ideas without properly crediting the original author. International rules against plagiasms:**

Level of Plagiarism	Examples	Legal Actions
Mild	<ul style="list-style-type: none"><li>✓ Source cited in text but left out of reference list.</li><li>✓ Quotation marks omitted around a quote.</li></ul>	Grade penalty or automatic zero.
Moderate	<ul style="list-style-type: none"><li>✓ Text copied from a source with minor changes.</li><li>✓ Source text or ideas rephrased without citation.</li></ul>	Failing grade on course
Severe	<ul style="list-style-type: none"><li>✓ Patchwork of different texts or ideas submitted as original.</li><li>✓ Paper or documents written by someone else.</li></ul>	Academic probation or expulsion



# Mode of Learning OOP

**Learn**

**Unlearn**

**Relearn**





# OOP Programming Tools

## Installation of VS Code:

- **Visual Studio (VS) Code is free.** Visit <https://code.visualstudio.com/download> to download VS code.
- **Add extensions using extension button** (three connected and one isolated rectangle). Write “C/C++” on search button and add extensions like C/C++ Compile Run, C/C++ intellisense, C/C++ Runner, C/C++ Extension Pack, etc.
- Don’t forget to install **Copilot**. Open and use **GitHub** account.

## Installation of IntelliJ:

- **Download and install latest LTS version of JDK, say JDK 21 (although the latest version is 24, but non-LTS).** Visit <https://www.oracle.com/java/technologies/downloads/#jdk21-windows>
- **Download and install IntelliJ IDEA Community Edition** (This is the only free version). Visit <https://www.jetbrains.com/idea/download/?section=windows>

**Note:** All C/C++ programs in the lecture notes are written using VS Code and Java Programs are written using IntelliJ IDEA Community Version.





# Work hard ! Be smart !!

## Work Hard

- **Don't miss classes.** Huge syllabus.  
Don't assume that that you can learn later. More than 3k+ pages to read.
- **Write each program of lecture notes at least once by your own.**  
You will feel easy, but face difficulty when try to do.

## Be Smart

- Understand the difference between **smartness** and **cheating**.
- Use **smart tools** for learning programming.  
You can use VS Code for C++/Java and IntelliJ for Java. Use of Intellisense and copilot in VS code raises your interest in coding.
- Get help from **ChatGPT, copilot, Claude, etc.**  
**Roo Code** – May mind to solve easy problem