

## **MTD215 Application of C++ in Multimedia**

**Level:** 2

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY SEMESTER

### **Synopsis:**

The course provides greater programming exposure to multimedia students who have completed ICT131, as an alternative to MTD213. The course briefly covers the basics of the C++ language and focuses on the application of C++ for animation and games design. Students will learn to create objects and to animate them using C++. In addition they will acquire the skills required to refine existing C++ codes in order to modify existing animation and games software.

### **Topics:**

- Fundamentals of C++ programming
- C++ statements and constructs
- Functions
- Elementary data structures
- Creating objects and animation
- Multimedia applications
- Games software

### **Textbooks:**

Joyce Farrell: Object Oriented Programming Using C++ (eTextbook) 4/e Cengage Learning  
ISBN-13: 9789814846011

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ISBN-13: 9789814846011-AA

**Learning Outcome:**

- Explain the syntax and structure of C++ language
- Identify suitable coding modules in simple programmes
- Implement multimedia applications using C++ language in an objected-oriented programming style
- Apply C++ language to program games
- Discuss how C++ language can work with graphics surfaces
- Appraise the use of SDL for input and sound

**Assessment Strategies:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
QUIZ	15
TUTOR-MARKED ASSIGNMENT	15
<b>Sub-Total</b>	<b>30</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
Written Exam	70
<b>Sub-Total</b>	<b>70</b>

**Weightage Total** **100**