



University of Mauritius

C-DAC School of Advanced Computing



CD 202 Diploma in Software Development

1. OBJECTIVES

The emergence of Information & Communication Technology (ICT) is emphatic in Mauritius and there is a demand for skilled manpower having expertise in programming technologies. The proposed Diploma in Software Development is geared towards producing personnel with strong software development skills in order to meet the growing requirements of the ICT industry. It also aims to develop them with a broad spectrum of technical and communication skills needed to meet the new challenges facing the ICT sector. The Diploma is tailor made for the ICT market, based on competency development, to produce skilled manpower fit and ready for work.

After completing the Diploma Programme, the students will be equipped with:

- A thorough understanding of programming concepts and application methodologies.
- Expertise to design and develop industry standard applications using state-of-the-art programming technologies.
- Software project development and management skills demanded in the industry.

2. GENERAL ENTRY REQUIREMENTS

As per General Entry Requirements of the University of Mauritius.

3. PROGRAMME REQUIREMENTS

At least 2 GCE 'A' Levels and Mathematics at O level.

Mature candidates holding Cambridge School Certificate with work experience may also be considered.

4. PROGRAMME DURATION

<i>Normal</i>	4 Semesters		<i>Maximum</i>	6 Semesters
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5. MINIMUM CREDITS REQUIRED FOR AWARD OF DIPLOMA

Core Modules	Electives	Diploma Project	Total
45	9	6	60

The modules may be offered in stand-alone mode, where a student can pick and choose the modules required for him/her, in which case a **Certificate of Attendance** would be issued.

6. PROGRAMME STRUCTURE

SEMESTER 1

Code	Module Name	Hr (L+P)	Credits
<u>Core Modules</u>			
MATH 1111	Mathematics	45	3
DAC 1104	Introduction to IT	45	3
CSE 1103	Introduction to Formal Logic	45	3
DAC 1101	Fundamentals of Programming Using C	30+30	3
CSE 1206	Structured System Analysis and Design	45	3

SEMESTER 2

Core Modules

DAC 1201	Business Communications	45	3
DAC 2101	Data Structures and Algorithms	45	3
DAC 1202	Object Oriented Programming	30+30	3
DAC 1204	Database Management System	30+30	3
DAC 2107	Software Engineering	45	3

SEMESTER 3

Core Modules

CSE 2105	Human Computer Interaction	45	3
DAC 2202	Operating Systems	45	3
DAC 1200	Mini Project	-	3

Electives

The elective modules are divided into three streams. Students have to opt for two modules from **ONLY ONE** of the following streams:

Stream 1 – Web Technologies

DAC 5101	Web Development	30+30	3
DAC 1211	Web Graphics	30+30	3

Stream 2 – Java Technologies

DAC 3105	Java Programming	30+30	3
DAC 1207	Java Applications	30+30	3

Stream 3 – .NET Technologies

DAC 2112	VB.NET Programming	30+30	3
DAC 1213	C# Programming	30+30	3
DAC 3104	ASP.NET Programming	30+30	3

SEMESTER 4

Core Modules

DAC 2212	Computer Networks	45	3
DAC 1210	Software Testing	30+30	3
DAC 3102	Principles of Software Project Management	45	3
DAC 2200	Diploma Project	-	6

C-DAC School of Advanced Computing (C-SAC)

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