



University of Mauritius



C-DAC School of Advanced Computing

CD 502 MSc Advanced Computing

**with Specialization in Application Software Development or
Computer Security and Forensics or Mobile and Wireless Technologies or
Web Technologies or Computer Networking**

1. OBJECTIVE

The MSc in Advanced Computing offers students the opportunity to study a wide variety of topics in depth and aims to prepare students for a rewarding career in computing in particular, and in information technology in general. It is geared towards providing an opportunity to those with an ambition to excel in the ICT sector globally.

2. GENERAL ENTRY REQUIREMENTS

At least a Second Class Degree from a recognized University or GPA not less than 2.50, or alternative qualifications acceptable to the University of Mauritius.

Mature Students who are older in terms of age (>30) and do not have the General Entry Requirements for admission at University of Mauritius but have a minimum of ANY ONE of the following criteria may also be considered:

- A recognized undergraduate Diploma in relevant field or any other equivalent qualifications acceptable to the University plus at least 15 years' of relevant work experience.
- A third class or pass degree in relevant field plus at least 7 years' of relevant work experience.

3. PROGRAMME REQUIREMENTS

A degree in Information Technology, Computer Science, Electronics & Communication Engineering, Mathematics with Computing, Physics with Electronics, Information Systems or any other Computer related field from a recognized higher education institution acceptable to the University of Mauritius.

4. PROGRAMME DURATION

Programme	Normal	Maximum
MSc (Part Time)	1.5 years	4 years

Different exit options of the programme are provided below:

Programme	Core Modules	Elective Modules	Dissertation	Total
Postgraduate Certificate	12 credits	-	-	12
Postgraduate Diploma	12 credits	12 credits	-	24
MSc	12 credits	12 credits	12 credits	36

5. PROGRAMME STRUCTURE

SEMESTER 1

Core Modules

Code	Module Name	Hr (L+P)	Credits
CSE 6022	Mobile and Wireless Networks	45+0	3
CSE 6027	Enterprise Application Development	30+30	3
DAC 6104	Computer Security	45+0	3
DAC 6201	Advanced Web Technologies	30+30	3

SEMESTER 2

Elective Modules

The elective modules are divided into different Specializations. Students have to opt for **4 modules** from **ONLY ONE** of the following Specializations:

Code	Module Name	Hr (L+P)	Credits
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Specialization Application Software Development

DAC 6203	Advanced .NET Programming	30+30	3
DAC 6204	Advanced JAVA Programming	30+30	3
DAC 6205	Software Quality Assurance and Testing	30+30	3
CSE 6209	Software Project Management	45+0	3

Specialization Computer Security and Forensics

DAC 6206	Cyber Forensics	30+30	3
DAC 6207	Ethical Hacking	30+30	3
DAC 6208	Cyber Crime and Law	45+0	3
DAC 6209	Information Security Management	45+0	3

Specialization Mobile and Wireless Technologies

DAC 6210	JAVA Wireless Programming	30+30	3
DAC 6211	Mobile and Wireless Applications	30+30	3
DAC 6212	Wireless Network Security	45+0	3
CSE 6042	Ubiquitous Computing	45+0	3

Specialization Web Technologies

DAC 6213	Web Services	30+30	3
DAC 6214	Semantic Web Technologies	30+30	3
DAC 6215	Server-side Programming	30+30	3
DAC 6216	Internet Security	45+0	3

Specialization Computer Networking

DAC 2212	Computer Networks	45+0	3
DAC 3101	Network Programming	30+30	3
DAC 6217	Network Administration	30+30	3
DAC 6218	Network Security	45+0	3

SEMESTER 3

Dissertation

DAC 6000	Dissertation		12
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