



UNIVERSITY
of
TECHNOLOGY,
MAURITIUS

School of Innovative Technologies and Engineering
Department of Business Informatics and Software Engineering

BSc (Hons) Web Technologies

PROGRAMME DOCUMENT

version 5.0
bwt
July 2021

University of Technology, Mauritius

La Tour Koenig, Pointe aux Sables, 11134, Mauritius

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A. PROGRAMME INFORMATION

This programme aims at producing graduates with a view to further develop our Information Technology industry in Mauritius, thus increasing our capacity to export Information Technology services. It focuses on web development since computer applications increasingly rely on the use of the internet and web technologies. There is a growing need in the country for graduates with skills geared towards developing, deploying and maintaining such applications.

This programme is designed to prepare students for professions and careers in the software and web applications development industry.

B. PROGRAMME AIMS

The BSc (Hons) Web Technologies aims at providing specialised skills for those wishing to become a specialist in the design and development of applications for the web and related technologies. Students will also have hands-on experience in various areas of web development from designing, developing, securing applications as well as managing projects.

The programme starts with a broad coverage of basic technical topics in level one. However, as from level 2, the student focusses on more advanced specialised topics. Those specialised subject areas will ensure that the student receives a deeper practical exposure to latest technologies thus helping to bridge the gap between university output and corporate requirements.

Students graduating from this programme are expected to take employment as web developers, web designers, mobile application developers, web application architects, Front-end / Back-end developers, UI/UX Designer and web server administrators amongst others. Students will also have the necessary skills to opt for more general IT positions. The programme has also been designed to cater for students willing to launch their own business in the ICT sector.

C. PROGRAMME OBJECTIVES

After successful completion of the programme, the graduates should:

- have a solid foundation in computing for web development
- gain in-depth knowledge in programming in latest web technologies.
- be skilled in designing and developing web-centric software.
- have acquired a good understanding of security measures for web servers
- be conversant with development of mobile-based application
- manage web-based software development projects.
- understand the core aspect of smart web technologies.

PART I - Regulations

D. GENERAL ENTRY REQUIREMENTS

As per UTM'S Admission Regulations, and 'Admission to Programmes of Study at First Degree Level' or APL / APEL requirements.

E. PROGRAMME ENTRY REQUIREMENTS

None.

F. PROGRAMME MODE AND DURATION

Full Time: Minimum 3 Years, Maximum 6 Years (Minimum 6 Semesters, Maximum 12 Semesters)

Part Time: Minimum 4½ Years, Maximum 7 Years (Minimum 9 Semesters, Maximum 14 Semesters)

G. TEACHING AND LEARNING STRATEGIES

- Lectures, Tutorials and Practical Laboratory Sessions;
- Class Tests and Assignments;
- Structured Discussions and Self-Directed Study;
- Workshops and Seminars;
- Case Study of real world problems;

H. STUDENT SUPPORT AND GUIDANCE

Each cohort of the programme is allocated a Programme Coordinator who acts as a liaison between the students and school management and provides support for academic management of the programme.

I. ATTENDANCE REQUIREMENTS

As per UTM's Regulations and Policy.

J. CREDIT SYSTEM

For the award of a Certificate, 60 credits are required.

For the award of a Diploma, 120 credits are required.

For the award of a Honours Degree, 180 credits are required.

"This programme is aligned with the European Credit and Transfer System (ECTS)".

K. STUDENT PROGRESS AND ASSESSMENT

For the award of an honours degree, all modules must be passed overall with passes in the examinations, coursework and other forms of assessment. To clear a module, students must secure at least 40% overall.

The programme is delivered mainly through lectures, tutorials, and practical laboratory sessions. Each module carries 100 marks and unless otherwise specified will be assessed as follows:

- Written and/or practical examination, and continuous assessment carrying up to 50% of total marks.
- Continuous assessment can be based on a combination of assignments, workshops, practical and class tests.
- Some modules may be evaluated by continuous assessment only upon the approval of the Programme Director. Modules which are evaluated on continuous assessment only (100% coursework) must consist of a **minimum of three assessments, inclusive of one class test**.
- The System Development Project will carry 300 marks (12 credits).

Module grading structure:

Grade	Marks x (%)
A	$70 \leq x \leq 100$
B	$60 \leq x < 70$
C	$50 \leq x < 60$
D	$40 \leq x < 50$
F	$x < 40$
A-D	Pass
F	Fail

L. EVALUATION OF PERFORMANCE

1. The % mark at Level 1 contributes a 20% weighting towards the degree classification.
2. The % mark at Level 2 contributes a 30% weighting towards the degree classification.
3. The % mark at Level 3 contributes a 50% weighting towards the degree classification.

M. AWARD CLASSIFICATION

Overall weighted mark y (%)

$70 \leq y \leq 100$
 $60 \leq y < 70$
 $50 \leq y < 60$
 $45 \leq y < 50$
 $40 \leq y < 45$
 $y < 40$

Classification

1st Class Honours
2nd Class 1st Division Honours
2nd Class 2nd Division Honours
3rd Class Honours
Pass Degree
No Award

N. PROGRAMME ORGANISATION AND MANAGEMENT

Programme Director: Mr. P. Kanaksabee

Contact Details:

- Room: G 2.12
- Telephone Number: (+230) 207 5250; Extension: 155
- Fax: (230) 234 1747
- Email: panaksabee@umail.utm.ac.mu

PART II -Programme Structure

O. BSc (Hons) WEB TECHNOLOGIES – FULL TIME (version 5.0)

YEAR 1 (Level 1)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
PROG1123C	Procedural Programming	2+1+7	6	PROG1126C	Programming Foundations	2+1+7	6
HCA1107C	Computer Systems	2+1+7	6	WAT1120C	Web Scripting	2+1+7	6
MATH1103C	Decision Mathematics	2+1+7	6	OSS1112C	Operating System Concepts	2+1+7	6
WAT1138C	Front-End Web Development	2+1+7	6	DBT1120C	Database Design Concepts	2+1+7	6
ITE1108C	Professional Issues in ICT	2+1+7	6	CAN1104C	Networking Essentials	2+1+7	6

YEAR 2 (Level 2)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
WAT1143C	UI/UX Design	2+1+7	6	WAT2140C	Web Service Development	2+1+7	6
WAT2139C	Back-End Web Development	2+1+7	6	MULT1119C	Game Design & Interactive Systems	2+1+7	6
PROG1124C	Software Programming Techniques	2+1+7	6	SEM2121C	Agile Project Management	2+1+7	6
DBT1102C	Database Application	2+1+7	6	WAT2108C	Open Source Web Technologies	2+1+7	6
SDT1119C	Systems Analysis & Design	2+1+7	6	MCT2108C	Cross-Platform Mobile Application	2+1+7	6

PRE – LEVEL 3 ACTIVITY			
Code	Activity	Hrs/Wk	Credits
PROJ2119C	Work Placement	Two-month training in an ICT industry or at UTM which will start immediately after the 15 th week of the 4 th Semester of the programme of study	6 credits Compulsory Submission of a Portfolio upon completion

YEAR 3 (Level 3)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
SECU2121C	Web Application Security	2+1+7	6	SEM2123C	Software Quality & Testing	2+1+7	6
WAT2107C	Web Server Administration	2+1+7	6	MKTG2106C	Digital Marketing	2+1+7	6
WAT2142C	Smart IoT Applications	2+1+7	6	ENTR3115C	Entrepreneurship and Ecommerce	2+1+7	6
WAT2141C	Data-Driven Application Framework	2+1+7	6	PROJ2119C	Work Placement (off semester)		6
PROJ3105C	System Development Project						12

P. BSc (Hons) WEB TECHNOLOGIES – Part Time (version 5.0)

YEAR 1 (Level 1)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
HCA1107C	Computer Systems	2+1+7	6	WAT1120C	Web Scripting	2+1+7	6
MATH1103C	Decision Mathematics	2+1+7	6	ITE1108C	Professional Issues in ICT	2+1+7	6
WAT1138C	Front-End Web Development	2+1+7	6	DBT1120C	Database Design Concepts	2+1+7	6
PROG1123C	Procedural Programming	2+1+7	6				

YEAR 2 (Level 2)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
PROG1126C	Programming Foundations	2+1+7	6	SDT1119C	Systems Analysis & Design	2+1+7	6
OSS1112C	Operating System Concepts	2+1+7	6	WAT1143C	UI/UX Design	2+1+7	6
CAN1104C	Networking Essentials	2+1+7	6	PROG1124C	Software Programming Techniques	2+1+7	6
				WAT2139C	Back-End Web Development	2+1+7	6

YEAR 3 (Level 3)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
DBT1102C	Database Application	2+1+7	6	SEM2121C	Agile Project Management	2+1+7	6
WAT2140C	Web Service Development	2+1+7	6	WAT2108C	Open Source Web Technologies	2+1+7	6
MULT1119C	Game Design & Interactive Systems	2+1+7	6	MCT2108C	Cross-Platform Mobile Application	2+1+7	6

YEAR 4 (Level 4)							
Semester 1				Semester 2			
Code	Modules	Hrs/Wk L+T/P+SD	Credits	Code	Modules	Hrs/Wk L+T/P+SD	Credits
SECU2121C	Web Application Security	2+1+7	6	WAT2141C	Data-Driven Application Framework	2+1+7	6
WAT2107C	Web Server Administration	2+1+7	6	SEM2123C	Software Quality & Testing	2+1+7	6
WAT2142C	Smart IoT Applications	2+1+7	6	MKTG2106C	Digital Marketing	2+1+7	6
	Portfolio		6				
				PROJ3105C	System Development Project		

YEAR 5 (Level 5)**Semester 1**

Code	Module	L+T/P+SD	Credits
ENTR3115C	Entrepreneurship and Ecommerce	2+1+7	6
PROJ3105C	System Development Project		12