Photo by: Geníustic Photographs

# 2021 - 2024 SEQUENCE PLANNER

**BSc.** Computing



Department of Computing, Mathematics and Technology

January Intake

# **Table of Contents**

At a Glance	1
Programmes	2
Core Sequence	3
Software Systems Emphasis Sequence (Yrs. 3 & 4)	7
Information Systems Emphasis Sequence (Yrs. 3 & 4)	11
Internet Technologies Emphasis Sequence (Yrs. 3 & 4)	15
Academic Advising	19

# At a Glance

This course sequence or semester planner is your personal roadmap to success throughout your academic journey. Think of it as a carefully designed itinerary that outlines which courses to take and when, ensuring you make the most of your learning experience. By following this plan, you'll navigate through your degree requirements in a logical order, considering prerequisites and building upon foundational knowledge.

This planner also lets you explore the potential concentrations of the BSc. With a well-structured course sequence, you'll be equipped to stay organised, manage your time effectively, and stay on track to achieve your academic goals.

This sequence planner is for those who registered in January.

# Programmes

At USC, we offer the Bachelor's of Science in Computing with three main emphasis or concentrations.

- Software Systems
- Information Systems
- Internet Technologies

The program consists of a core sequence of courses required to be completed within your first and second year - no matter the emphasis. Third and Fourth year courses are required to fulfil the requirements of the specific emphasis chosen.

Degree Components	No of Credits
General education requirements	45
Courses required for the core/major (Computing)	30
Cognate requirements	26
Courses for the Emphasis	23
TOTAL	124

# **Core Sequence**

The following is a list of all the core courses that must be completed within your first and second year - no matter the emphasis chosen.

## Year 1

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR120	Introduction to Computer Programming	3	None
CPTR170	Microcomputer Hardware	3	None
ENGL125	Academic Writing 1	3	CXC English
RELT100	God and Human Life	3	None
COMM104	Communication Skills	3	None
IDSC110	College Success and Career Planning	1	None
	TOTAL CREDITS	16	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR150	Computer Science 1	3	CPTR120
MATH141	Calculus 1	4	CSEC Math or CAPE Add Math
ENGL225	Academic Writing 2	3	ENGL125
ECON226 or ACCT125	Principles of Microeconomics Introduction to Financial Accounting	3	None
HLED220	Community and Environmental Health	3	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR251	Computer Science 2	3	CPTR150
MATH142	Calculus 2	4	MATH142
ECON227 or ACCT126	Principles of Marcoeconomics Introduction to Managerial Accounting	3	ECON226 or ACCT125
IDSC205 or MUHL220	Introduction to Fine Arts Music Appreciation	2	None
RELB210	Jesus in His Times and Ours	3	None
HMEC129	Social and Professional Ethics	1	None
	TOTAL CREDITS	16	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR270	Computer Organisation and Assembler	3	CPTR150, CPTR170
MATH215	Introduction to Linear Algebra	3	MATH142
CPTR331	Web Development	3	CPTR250
PSYC101	Introduction to Psychology	3	CPTR250
PHYS115	Concepts of Physics	3	None
	TOTAL CREDITS	15	

# **Software Systems Emphasis**

The following is a list of all the courses required to fulfil the requirements of the Software Systems Emphasis.

# Year 3

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR290	Data Structures and Algorithms	3	CPTR251, MATH215
CPTR282	Operating Systems 1	3	CPTR251, CPTR270
CPTR312	Networks and Communications	3	CPTR251
MATH182	Calculus with Applications	3	MATH142
RELT250	Personal Spirituality and Faith	3	None
	TOTAL CREDITS	15	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR421	Object Oriented Design and Programming	3	CPTR251
CPTR311	Systems Analysis and Design	3	None
CPTR390	Fundamentals of Cybersecurity	3	CPTR312
HIST147* or HIST104 or HIST105	West Indian History World Civilisations 1 World Civilisations 2	3	None
	TOTAL CREDITS	15	

\*If History was not passed at the GCE/CXC/CSEC level, HIST147 must be taken, before any of the electives

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR392	Business Programming	3	CPTR251
CPTR332	Internet Technologies	3	CPTR331, CPTR321
MATH355	Discrete Mathematics	3	MATH182
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
RELT340	Religion and Ethics in Modern Society	3	None
	TOTAL CREDITS	15	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR441	Computer Graphics	3	CPTR251
CPTR361	Software Engineering	3	CPTR311
STAT340	Probability Theory and Statistical Applications	3	MATH142, MATH182
BHSC100	Philosophy of Service	2	None
EDTE354	Philosophy of Education	2	None
	TOTAL CREDITS	13	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR362	Software Engineering Group Project	2	All computing core
PEAC110 or PEAC130	Personal Physical Fitness Special Activities	1	None
	TOTAL CREDITS	3	

# **Information Systems Emphasis**

The following is a list of all the courses required to fulfil the requirements of the Information Systems Emphasis.

# Year 3

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR290	Data Structures and Algorithms	3	CPTR251, MATH215
CPTR282	Operating Systems 1	3	CPTR250, CPTR270
CPTR312	Networks and Communications	3	CPTR251
MATH182	Calculus with Applications	3	MATH142
RELT250	Personal Spirituality and Faith	3	None
	TOTAL CREDITS	15	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR421	Object Oriented Design and Programming	3	CPTR251
CPTR450	ICT Documentation and Change	3	None
CPTR390	Fundamentals of Cybersecurity	3	CPTR312
HIST147* or HIST104 or HIST105	West Indian History World Civilisations 1 World Civilisations 2	3	None
	TOTAL CREDITS	15	

\*If History was not passed at the GCE/CXC/CSEC level, HIST147 must be taken, before any of the electives

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR392	Business Programming	3	CPTR250
CPTR382	Information Management	3	CPTR331, CPTR321
MATH355	Discrete Mathematics	3	MATH182
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
RELT340	Religion and Ethics in Modern Society	3	None
	TOTAL CREDITS	15	

#### Semester One (January)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR411	Information Assurance and Security	3	CPTR251
CPTR420	Introduction to Data Science	3	CPTR311
STAT340	Probability Theory and Statistical Applications	3	MATH182
BHSC100	Philosophy of Service	2	None
EDTE354	Philosophy of Education	2	None
	TOTAL CREDITS	13	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR492	Special Projects	2	All computing core courses
PEAC110 or PEAC130	Personal Physical Fitness Special Activities	1	CPTR311
	TOTAL CREDITS	3	

# Internet Technologies Emphasis

The following is a list of all the courses required to fulfil the requirements of the Internet Technologies Emphasis.

# Year 3

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR290	Data Structures and Algorithms	3	CPTR251, MATH215
CPTR282	Operating Systems 1	3	CPTR251, CPTR270
CPTR312	Networks and Communications	3	CPTR251
MATH182	Calculus with Applications	3	MATH142
RELT250	Personal Spirituality and Faith	3	None
	TOTAL CREDITS	15	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR421	Object Oriented Design and Programming	3	CPTR251
CPTR31	Systems Analysis and Design	3	None
CPTR390	Fundamentals of Cybersecurity	3	None
HIST147* or HIST104 or HIST105	West Indian History World Civilisations 1 World Civilisations 2	3	None
	TOTAL CREDITS	15	

\*If History was not passed at the GCE/CXC/CSEC level, HIST147 must be taken, before any of the electives

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR392	Business Programming	3	CPTR251
CPTR332	Internet Technologies	3	CPTR331, CPTR321
MATH355	Discrete Mathematics 3		MATH182
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
RELT340	Religion and Ethics in Modern Society	3	None
	TOTAL CREDITS	15	

#### Semester One (September)

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR441	Computer Graphics	3	CPTR251
CPTR420	Introduction to Data Science	3	CPTR311
STAT340	Probability Theory and Statistical Applications	3	MATH182
BHSC100	Philosophy of Service	2	None
EDTE354	Philosophy of Education	2	None
	TOTAL CREDITS	13	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR492	Special Projects	2	All computing core courses
PEAC110 or PEAC130	Personal Physical Fitness Special Activities	1	None
	TOTAL CREDITS	3	

# **Academic Advising**

During your first and second year, you will be advised and audited by the Academic Advisement Department. However, in your third and fourth year, you will be advised within the department.

The assignment of academic advisors are based on your last name, and it is as follows:

LAST NAMES	ACADEMIC ADVISOR
A - I	Dr. Fayola St. Bernard
J - R	Mr. Joel Mitchell
S - Z	Mr. Byron Hunte