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# 2024 - 2027 SEQUENCE PLANNER

**BSc.** Computing



Department of Computing, Mathematics and Technology

September Intake

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# 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 September.

# 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
MATH141	Calculus I	4	None
ENGL125	Academic Writing I	3	None
RELT100	God and Human Life	3	None
COMM104	Communication Skills	3	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR150	Computer Science I	3	CPTR120
CPTR170	Microcomputer Hardware	3	None
MATH142	Calculus II	4	MATH141
ECON226 or ACCT121	Principles of Microeconomics Fundamentals of Accounting I	3	None
HLED220	Community and Environmental Health	3	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR251	Computer Science II	3	CPTR150
CPTR270	Computer Organisation and Assembler	3	CPTR150, CPTR170
MATH215	Introduction to Linear Algebra	3	MATH142
ECON227 or ACCT122	Principles of Macroeconomics Fundamentals of Accounting II	3	ECON226 or ACCT121
RELB210	Jesus in His Times and Ours	3	None
IDSC110	College Success and Career Planning	1	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR290	Data Structures and Algorithms	3	CPTR251, MATH215
CPTR282	Operating Systems I	3	CPTR251, CPTR170
CPTR312	Networks and Telecommunications	3	None
ENGL225	Academic Writing II	3	ENGL125
IDSC205 or MUHL220	Introduction to Fine Arts Music Appreciation	2	None
PEAC110 or PEAC130	Personal Physical Fitness Special Activities	1	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
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR331	Web Development	3	CPTR251
CPTR421	Object Oriented Design and Programming	3	CPTR251
CPTR311	Systems Analysis and Design	3	None
PSYC101	Introduction to Psychology	3	None
	TOTAL CREDITS	15	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR352	Business Programming	3	CPTR251, CPTR321
MATH182	Calculus with Applications	3	MATH142
CPTR332	Internet Technologies	3	CPTR331, CPTR321
EDTE354	Philosophy of Education	2	None
RELT250	Personal Spirituality and Faith	3	None
HMEC129	Social and Professional Ethics	1	None
	TOTAL CREDITS	15	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR441	Computer Graphics	3	CPTR251
CPTR361	Software Engineering	3	CPTR311
STAT340	Probability Theory and Statistical Applications	3	MATH182
CPTR390	Fundamentals of Cybersecurity	3	CPTR312
RELT340	Religion and Ethics in Modern Society	3	None
	TOTAL CREDITS	15	

#### Semester Two

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR362	Software Engineering Group Project	2	All computing core
MATH355	Discrete Mathematics	3	MATH182
PHYS115	Concepts of Physics	3	None
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
BHSC100	Philosophy of Service	2	None
HIST147* or HIST104 or HIST105	West Indian History World Civilisations I World Civilisations II	3	None
	TOTAL CREDITS	16	

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

## **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
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR331	Web Development	3	CPTR251
CPTR421	Object Oriented Design and Programming	3	CPTR251
CPTR450	ICT Change and Documentation	3	None
PSYC101	Introduction to Psychology	3	None
	TOTAL CREDITS	15	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR352	Business Programming	3	CPTR251, CPTR321
MATH182	Calculus with Applications	3	MATH142
CPTR382	Information Management	3	None
EDTE354	Philosophy of Education	3	None
RELT250	Personal Spirituality and Faith	3	None
HMEC129	Social and Professional Ethics	1	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR411	Information Assurance and Security	3	None
CPTR420	Introduction to Data Science 3 MATH <sup>2</sup>		MATH182
STAT340	Probability Theory and Statistical 3 MA Applications		MATH182
CPTR390	Fundamentals of Cybersecurity 3 CP		CPTR312
RELT340	RELT340 Religion and Ethics in Modern Society		None
TOTAL CREDITS		15	

#### Semester Two

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR492	Special Projects	2	All courses
MATH355	Discrete Mathematics	3	MATH182
PHYS115	Concepts of Physics	3	None
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
BHSC100	Philosophy of Service	2	None
HIST147* or HIST104 or HIST105	West Indian History World Civilisations I World Civilisations II	3	None
	TOTAL CREDITS	16	

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

## 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
CPTR321	Database Systems Design and Development	3	CPTR251
CPTR331	Web Development 3 CP		CPTR251
CPTR421	Object Oriented Design and Programming 3		CPTR251
CPTR311	Systems Analysis and Design 3		None
PSYC101	Introduction to Psychology	3	None
TOTAL CREDITS		15	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR352	Business Programming	3	CPTR251, CPTR321
MATH182	Calculus with Applications	3	MATH142
CPTR332	Internet Technologies	3	CPTR331, CPTR321
EDTE354	Philosophy of Education	3	None
RELT250	Personal Spirituality and Faith	3	None
HMEC129	Social and Professional Ethics	1	None
	TOTAL CREDITS	16	

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR441	Computer Graphics	3	CPTR251
CPTR420	Introduction to Data Science	3	MATH182
STAT340	Probability Theory and Statistical Applications	3	MATH182
CPTR390	Fundamentals of Cybersecurity	3	CPTR312
RELT340 Religion and Ethics in Modern Society		3	None
TOTAL CREDITS		16	

#### Semester Two

COURSE CODE	COURSES	CREDITS	PREREQUISITES
CPTR492	Special Projects	2	All courses
MATH355	Discrete Mathematics	3	MATH182
PHYS115 Concepts of Physics 3		None	
SPAN103 or FREN101	Spanish for Business Conversational French	3	None
BHSC100	Philosophy of Service	2	None
HIST147* or HIST104 or HIST105	West Indian History World Civilisations I World Civilisations II	3	None
TOTAL CREDITS		16	

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

# **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 - 1	Dr. Fayola St. Bernard
J - R	Mr. Joel Mitchell
S - Z	Mr. Byron Hunte