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2024 - 2027 SEQUENCE PLANNER

BSc. Computing



UNIVERSITY *of the*
SOUTHERN CARIBBEAN

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

Semester Two (January)

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

Year 1

Semester One (September)

| COURSE CODE | COURSES | CREDITS | PREREQUISITES |
|--------------------------|--|-----------|---------------|
| CPTR150 | Computer Science I | 3 | CPTR120 |
| MATH141 | Calculus I | 4 | None |
| PHYS115 | Concepts of Physics | 3 | None |
| ECON226 or ACCT121 | Principles of Microeconomics Fundamentals of Accounting I | 3 | None |
| HLED220 | Community and Environmental Health | 3 | None |
| TOTAL CREDITS | | 16 | |

Year 2

Semester Two (January)

| COURSE CODE | COURSES | CREDITS | PREREQUISITES |
|--------------------------|---|-----------|--------------------------|
| CPTR251 | Computer Science II | 3 | CPTR150 |
| MATH142 | Calculus II | 4 | MATH142 |
| ECON227 or ACCT122 | Principles of Macroeconomics Fundamentals of Accounting II | 3 | ECON226 or ACCT121 |
| 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 | |

Year 2

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 |
| ENGL225 | Academic Writing II | 3 | ENGL125 |
| 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

Semester Two (January)

| COURSE CODE | COURSES | CREDITS | PREREQUISITES |
|----------------------|---------------------------------|-----------|---------------------|
| CPTR290 | Data Structures and Algorithms | 3 | CPTR251, MATH215 |
| CPTR282 | Operating Systems I | 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 | |

Year 3

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 I World Civilisations II | 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

Year 4

Semester Two (January)

| 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 | |

Year 4

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 | |

Year 4

Semester Two (January)

| 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

Semester Two (January)

| COURSE CODE | COURSES | CREDITS | PREREQUISITES |
|----------------------|---------------------------------|-----------|---------------------|
| CPTR290 | Data Structures and Algorithms | 3 | CPTR251, MATH215 |
| CPTR282 | Operating Systems I | 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 | |

Year 3

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 I World Civilisations II | 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

Year 4

Semester Two (January)

| 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 | |

Year 4

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 | |

Year 4

Semester Two (January)

| 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

Semester Two (January)

| COURSE CODE | COURSES | CREDITS | PREREQUISITES |
|----------------------|---------------------------------|-----------|---------------------|
| CPTR290 | Data Structures and Algorithms | 3 | CPTR251, MATH215 |
| CPTR282 | Operating Systems I | 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 | |

Year 3

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 I World Civilisations II | 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

Year 4

Semester Two (January)

| 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 | |

Year 4

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 | |

Year 4

Semester Two (January)

| 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 |