**TABLE OF CONTENTS**

**MESSAGE FROM THE DEAN**.......................... 3

**SECTION I - STAFF LISTING**........................ 4
  - OFFICE OF THE DEAN .................................................. 4
  - NATIONAL HERBARIUM OF TRINIDAD AND TOBAGO .... 5
  - DEPARTMENT OF CHEMISTRY ................................. 5
  - DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY ........................................... 8
  - DEPARTMENT OF LIFE SCIENCES ............................ 9
  - DEPARTMENT OF MATHEMATICS AND STATISTICS .... 12
  - DEPARTMENT OF PHYSICS ........................................ 14

**SECTION II - INTRODUCTION** ..................... 16
  - A. PROGRAMME OFFERING IN THE FACULTY OF SCIENCE AND TECHNOLOGY .................. 16
  - B. COURSES OFFERED AND THEIR WEIGHTING .................................................. 17
  - C. CO-CURRICULAR CREDITS ........................................ 18
  - D. EVENING UNIVERSITY ........................................ 19
  - E. DEAN’S HONOUR ROLL ........................................ 19
  - F. ACADEMIC SUPPORT/DISABILITIES LIAISON UNIT (ASDLU) .................................. 19

**SECTION III - GLOSSARY** .......................... 20

**SECTION IV - FACULTY REGULATIONS** ........... 22
  - G. QUALIFICATIONS FOR ADMISSION INTO THE FACULTY ........................................ 22
  - H. APPLICATION PROCEDURE ................................ 22
  - I. LIST OF EXEMPTIONS ......................................... 23
  - J. REGISTRATION ...................................................... 24
  - K. PROGRESS THROUGH THE PROGRAMME ............ 25
  - L. STUDY ABROAD/EXCHANGE PROGRAMMES ......... 26
  - M. EXAMINATIONS ................................................... 26
  - N. PLAGIARISM DECLARATION ................................. 27
  - O. GENERAL REQUIREMENTS FOR THE AWARD OF THE DEGREE ................................ 27
  - P. DECLARATION OF MAJORS, MINORS AND SPECIAL OPTIONS .................................. 27
  - Q. TIME LIMITS FOR COMPLETION AND ENFORCED WITHDRAWALS ......................... 28
  - R. LEAVE OF ABSENCE AND VOLUNTARY WITHDRAWAL ........................................... 28
  - S. GPA AND CLASS OF DEGREE AWARDED .......................................................... 29
  - T. GRADING SCHEME ................................................ 30
  - U. CLASS OF HONOURS ............................................ 30
  - V. AEGROTAT DEGREE ............................................ 30

**SECTION V - REGULATIONS GOVERNING THE FST SUMMER SCHOOL PROGRAMME** .............. 31

**SECTION VI - PRIZES** .................................. 33
  - FACULTY PRIZES .................................................... 33
  - DEPARTMENT OF CHEMISTRY ............................... 33
  - DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY ...................................... 33
  - DEPARTMENT OF LIFE SCIENCES ........................ 33
  - DEPARTMENT OF MATHEMATICS & STATISTICS .... 34
  - DEPARTMENT OF PHYSICS ...................................... 34

**SECTION VII - PROGRAMME OUTLINES** ........... 35

**DEPARTMENT OF CHEMISTRY** ....................... 35
  - Major in Chemistry ............................................ 36
  - COURSE LISTING .................................................. 36
  - Minor in Chemistry ............................................. 37
  - COURSE LISTING .................................................. 37
  - Minor in Analytical Chemistry ........................... 37
  - COURSE LISTING .................................................. 37
  - Minor in Applied Chemistry ............................... 37
  - COURSE LISTING .................................................. 37
  - BSc Chemistry and Management ........................ 37
  - BSc Chemistry and Management ........................ 37

**DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY** ........................................... 39
  - COURSE LISTING .................................................. 39
  - COURSES NOT OFFERED IN ACADEMIC YEAR 2012/2013 ........................................... 40
  - Major in Computer Science ................................ 41
  - COURSE LISTING .................................................. 41
  - Minor in Computer Science ............................... 41
  - BSc Information Technology ............................... 42
  - COURSE LISTING .................................................. 42
  - Bsc Computer Science (Special) ......................... 43
  - COURSE LISTING .................................................. 43
  - BSc Computer Science and Management ................ 44
  - COURSE LISTING .................................................. 44

**DEPARTMENT OF LIFE SCIENCES** .................... 45
  - COURSE LISTING .................................................. 45
  - MAJORS .............................................................. 46
  - MINORS .............................................................. 46
  - Major in Biochemistry ....................................... 47
  - COURSE LISTING (PRIOR TO 2012/13) ................. 47
  - COURSE LISTING (WITH EFFECT FROM 2012/13) .... 47
  - Major in Biology ............................................... 47
  - COURSE LISTING (PRIOR TO 2012/13) ................. 47
  - COURSE LISTING (WITH EFFECT FROM 2012/13) .... 48
  - Major in Environmental & Natural Resource Management ....................................................... 49
  - COURSE LISTING .................................................. 49

  Return to Table of Contents
  Faculty of Science & Technology Online
MINORS ................................................................. 50
  Minor in Biochemistry .................................................. 50
  COURSE LISTING ...................................................... 50
  Minor in Biology ......................................................... 50
  Minor in Biotechnology ............................................... 51
  COURSE LISTING ...................................................... 51
  Minor in Botany .......................................................... 51
  COURSE LISTING ...................................................... 51
  Minor in Environmental Biology .................................... 51
  COURSE LISTING ...................................................... 51
  Minor in Environmental & Natural Resource Management
  .................................................................................. 51
  COURSE LISTING ...................................................... 51
  Minor in Marine Biology .............................................. 52
  COURSE LISTING ...................................................... 52
  Minor in Zoology .......................................................... 52
  COURSE LISTING ...................................................... 52

DEPARTMENT OF MATHEMATICS & STATISTICS .......... 53
  COURSE LISTING ...................................................... 53
  COURSES NOT OFFERED IN ACADEMIC YEAR
  2012/2013 .................................................................. 53
  Major in Mathematics ................................................ 54
  COURSE LISTING ...................................................... 54
  Double Major in Mathematics ..................................... 55
  COURSE LISTING ...................................................... 55
  Minor in Mathematics .................................................. 56
  COURSE LISTING ...................................................... 56
  Minor in Statistics ....................................................... 56
  COURSE LISTING ...................................................... 56
  BSc Actuarial Science .................................................. 57
  COURSE LISTING ...................................................... 57
  Minor in Actuarial Science ......................................... 57
  COURSE LISTING ...................................................... 57

DEPARTMENT OF PHYSICS ........................................ 58
  Major in Physics ......................................................... 59
  COURSE LISTING ...................................................... 59
  Physics Minors .......................................................... 59
  ELECTRONICS MINOR ............................................. 59
  ENVIRONMENTAL PHYSICS MINOR ......................... 59
  MATERIALS SCIENCE MINOR ................................... 60
  MEDICAL PHYSICS & BIOENGINEERING MINOR ....... 60

SECTION VIII: COURSE DESCRIPTIONS ...................... 60

APPENDIX 1 - PRE-REQUISITES FOR CROSS FACULTY
  COURSES ................................................................. 124

APPENDIX 2 - APPROVED SCIENCE CAPE/GCE A-LEVEL
  SUBJECTS ................................................................. 125

APPENDIX 3 – UNIVERSITY REGULATIONS ON
  PLAGIARISM ............................................................ 126

PLAGIARISM DECLARATION ........................................ 128

APPENDIX 4 – LIST OF ANTI-REQUISITES ...................... 131
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Welcome to the Faculty of Science & Technology (FST), The University of the West Indies, St. Augustine. We are extremely proud and delighted that you have chosen the FST for your tertiary education. This new Faculty which partially replaces the former Faculty of Science & Agriculture, will continue to focus on traditional and important disciplines in science such as Mathematics, Physics, Chemistry, Computer Science and Biological Sciences. We will also offer programmes in exciting and important areas of technology such as Biotechnology, Environmental Technology, Information Technology, and Alternative Energy Technology.

The FST is the second largest faculty at the St Augustine Campus and also the most diverse in terms of academic programmes offered. At the FST we have highly qualified and competent academic, administrative, technical and support staff, and many state-of-the-art laboratories. We promise to offer you an educational experience that is second to none.

This booklet contains important information on Faculty Regulations as well as details on our various programmes and courses; we encourage you to become very familiar with it. We have put in place several support systems in order to facilitate your success in your chosen field of study. We encourage you to visit your academic advisor on a regular basis to seek assistance in planning your academic programme of study. We also have a Student Services, Support and Development Unit and a dedicated Deputy Dean (Student Matters) who is readily available to assist in addressing problems that you may encounter from time to time.

On behalf of the staff of the FST, I wish you a warm welcome as well as an enjoyable and successful stay in our Faculty.

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SECTION II - INTRODUCTION

A. PROGRAMME OFFERING IN THE FACULTY OF SCIENCE AND TECHNOLOGY

1. The Faculty of Science and Technology (FST) offers the following undergraduate programmes leading to the award of BSc degrees:

BSc IN THE FOLLOWING SPECIAL OPTIONS:

i. Actuarial Science
ii. Chemistry and Management
iii. Computer Science
iv. Computer Science and Management
v. Information Technology

The Faculty also offers a **BSc (General) degree** with major(s) and minor(s) in various disciplines as shown in TABLE 1.

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>MAJORS</th>
<th>MINORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>Biochemistry</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
<td>Chemistry</td>
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<tr>
<td>Computer Science</td>
<td>Computer Science</td>
<td>Computer Science</td>
</tr>
<tr>
<td>(Multidisciplinary)</td>
<td>Environmental &amp; Natural Resource Management</td>
<td>Environmental &amp; Natural Resource Management</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Mathematics</td>
<td>Mathematics</td>
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<tr>
<td>Physics</td>
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<td>Medical Physics &amp; Bioengineering</td>
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Note: For detailed information on special options/majors/minors, please refer to the relevant Departmental sections of this booklet.
2. The degree of Bachelor of Science is awarded on the basis of a programme of studies selected from courses in the Science disciplines together with certain Foundation courses and in some cases a number of approved courses from other Faculties.

3. FST offers the following BSc degrees (the terms Major, Minor, and Special Option are defined in the Glossary):

   (a) A BSc (General) degree with
      i. a single major in a FST discipline.
     ii. a joint major in two disciplines only, one of which may be from a Faculty other than the FST.
     iii. double majors in a single FST discipline, currently offered only in Mathematics and Biology.
     iv. a single major in a FST discipline PLUS one or two minors from FST and/or other Faculties.

   (b) BSc Special Option comprising a prescribed set of departmental, inter-departmental FST or out-of-faculty courses.

   (c) All students admitted to the FST to read the BSc Special Options listed hereunder are required to register for courses in the Faculty of Social Sciences and must be familiar with the list of cross faculty pre-requisites and equivalencies listed in Appendix 1.

     i. BSc Actuarial Science
     ii. BSc Chemistry and Management
     iii. BSc Computer Science and Management

4. The following courses which may consist of both theoretical and/or practical components are offered by the University:

   (a) FST FACULTY COURSES:
      These are courses offered by the FST (in-faculty courses). These include Level 0 (or Preliminary) courses in Physics, Chemistry, Mathematics and Biology (taught by the Open Campus on behalf of FST), Level I (or Introductory) and Levels II & III (or Advanced) courses. Preliminary courses may be used to satisfy matriculation requirements or pre-requisites for Level I, II or III courses.

      Preliminary courses, however, do not contribute towards the credit requirements for the award of the BSc degree but contribute towards a semester credit loading.

   (b) SERVICE COURSES:
      These provide students with basic technical and analytical skills.

   (c) OUT-OF-FACULTY COURSES:
      These are courses offered by Faculties other than FST which may contribute towards the requirements for the award of a degree. Approval must be granted by the Dean before a student can pursue an out-of-Faculty course if such course is not part of the candidate’s degree programme.

   (d) FOUNDATION COURSES:
      i. In order to qualify for the award of a BSc degree in the FST, all students must complete a minimum of nine (9) credits of Foundation Courses. These courses are Level I courses and are designed to augment the general education of students.
      ii. The three Foundation Courses (3 credits each) required to be taken by the FST students are:
          • FOUN 1101 - Caribbean Civilisation
          • FOUN 1102 - Academic Writing for Different Disciplines (Option C)
          • FOUN 1301 - Law, Governance, Economy and Society
      iii. The Foundation Course, FOUN 1210 (Science, Medicine and Technology in Society) will NOT count for credit towards programmes in FST.
      iv. The Foundation courses will be examined on a Pass/Fail basis and will not count towards a student’s GPA.
v. On entry into the FST a student may be required to pass the English Language Proficiency Test (ELPT) before s/he can register for FOUN 1102. However, students with the following qualifications can register directly for FOUN 1102.
   • Grade I in CSEC English Language, or
   • Grade I or II in CAPE Communication Studies, or
   • Grade A or B in General Paper in the GCE A-Level Examination.

5. Courses normally extend over one (1) semester, but in special cases may extend over two (2) semesters.

6. The weight of a course is expressed in terms of credit hours, and the credit-weighting of a course is determined by the Faculty which administers the courses. In general, a course with one contact hour per week for one semester has a weighting of one credit.

C. CO-CURRICULAR CREDITS

7. Courses involving independent, supervised activities which would earn the student co-curricular credits may be pursued upon approval by the Campus Academic Board. The co-curricular programme allows you to choose from a range of non-academic courses that help you to acquire characteristics to excel in life in the 21st century. These courses are practical in nature and help you to develop attributes which are critical for your success.

i. Students are eligible to register for co-curricular credits after their first semester of studies.

ii. Each student is eligible to count no more than three (3) credits towards his/her degree for involvement in co-curricular activities.

iii. The programme of co-curricular activities must have the approval of the Faculty and Academic Board before it is undertaken by the student.

iv. A Deputy Dean with responsibility for Outreach is the Faculty’s Coordinator for the co-curricular programme. Please consult with the Coordinator if you are interested in pursuing co-curricular activities.

v. Co-curricular credits will be awarded on the following basis:
   • students must be involved in the activity for at least one (1) semester
   • explicit learning outcomes must be identified for each activity
   • there must be clearly defined mode(s) of assessment for each activity

vi. The grading of co-curricular activities will be on a pass/fail basis and will not contribute to a student’s GPA

vii. The three Level I credits earned for involvement in co-curricular activities may be included as part of the overall general credit requirement for the award of the BSc General Degree. However, such credits earned shall NOT be used in the computation of a student’s Weighted Grade Point Average for determining the Class of Honours.

viii. For further details on co-curricular offerings, please consult the Deputy Dean (Outreach) or visit the website at http://sta.uwi.edu/cocurricular/

Examples of approved co-curricular offerings are:
   • COCR 1001 - Sports: Minding SPEC - offered by the Office of Sport and Physical Education
   • COCR 1002 - Debating - offered by Student Advisory Services
   • COCR 1003 - Leadership and/or Service - offered by Student Advisory Services
   • COCR 1012 - Workplace Protocol for Students Programme - offered by the Faculty of Social Sciences
   • Professional Microsoft Office - offered by Campus IT Services (CITS) in conjunction with the FST
     • COCR 1025 - Microsoft Office Word 2010
     • COCR 1026 - Microsoft Office Excel 2010
     • COCR 1027 - Microsoft Office PowerPoint 2010
     • COCR 1028 - Microsoft Office Outlook 2010
     • COCR 1029 - Microsoft Office Access 2010
D. EVENING UNIVERSITY

8. Currently, the FST offers only the BSc in Information Technology through the Evening University. Please consult the section under the Department of Computing and Information Technology in this booklet for specific details of the programme offered.

9. Students in the Evening University Programme will normally be required to register for a maximum of 9 credits of courses per semester. There will be three semesters per year in the Evening University. Classes will normally be held during the hours of 5:00-10:00 p.m. on weekdays and also on Saturdays. For further general information about the Evening University Programmes, please contact the Office of the Evening University or visit the website http://sta.uwi.edu/evening/introduction.asp

E. DEAN’S HONOUR ROLL

10. Eligibility for inclusion on the Dean’s Honour Roll
The following guidelines are applicable:

(a) Inclusion on the Dean’s Honour Roll will be on a Semester basis. The Summer School Programme will not be considered.

(b) Students must obtain a Semester GPA of 3.8 and above in any semester

(c) Full-time students must have passed a minimum of 12 Faculty credits in the semester. Part-time and Evening University students must have passed a minimum of 6 credits of Faculty courses in the semester.

Credits gained for the following will NOT be taken into consideration in computing the Dean’s Honour Roll:

- Foundation courses
- Co-curricular offerings
- Internship programmes
- Audited courses
- Summer courses
- Not-for-credit courses

(d) Repeat courses will be included in the computation of the Semester GPA towards the Dean’s Honour Roll

(e) Special consideration will be given to students who are differently-abled and who have obtained a semester GPA of 3.8 and above but who have registered for less than 12 Faculty credits. Such students must declare and provide supporting documents as evidence of their disability at the start of the semester.

Decisions for inclusion of such differently-abled students in the Dean’s Honour Roll will be taken at the Faculty’s Board of Examiners Meeting. In addition, such students must be registered with the Academic Support/Disabilities Liaison Unit (ASDLU).

F. ACADEMIC SUPPORT/DISABILITIES LIAISON UNIT (ASDLU)

11. The Unit is the first and most important stop for high quality academic support for the diverse population of students throughout the University including full-time, part-time and evening students, international students, student athletes and students with special needs.

(a) Support Services for STUDENTS WITH SPECIAL NEEDS (Temporary and Permanent)

- Provision of aids and devices such as laptops, USB drives, tape recorders and special software
- Special accommodations for examinations
- Classroom accommodations
- Academic support
- Liaison with faculties and departments

Students with special needs should make contact before or during registration. Every effort will be made to facilitate your on-campus requirements in terms of mobility, accommodation, coursework, examinations, and other areas.

No student of The UWI will be discriminated against on the basis on having special needs. Sharing your needs before registration will enable us to serve you better as a part of the Campus community.

(b) Academic Support Services for ALL STUDENTS

- Educational Assessment – LADS (dyslexia) – LASSI (Study Skills)
- Examination Strategies
- Workload Management
- Career Planning
- Study Skills
- Peer Tutoring
How do I register at ASDLU?

- Visit ASDLU to make an appointment to meet the Co-ordinator.
- Complete the required registration form
- Students with disabilities must submit a medical report from a qualified medical professional
- An assessment of the student’s needs will be conducted
- The required assistance will be provided

All Students experiencing academic challenges should communicate with Ms. Jacqueline Huggins, Coordinator, Academic Support/Disabilities Liaison Unit, south of The Alma Jordan Library.

Tel: 662-2002 Exts 83921, 83923, 83866, 84254.

Hours: 8:30 am-4:30 pm
Monday, Wednesday & Friday
8:30 am – 6:00 pm
Tuesday & Thursday to accommodate Part-time and Evening students.

Email: ASDLU.Office@sta.uwi.edu.

Registration forms are available at the office or from the website at www.sta.uwi.edu/asdlu

SECTION III - GLOSSARY

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-requisite</td>
<td>Two mutually exclusive courses of which credit may be granted for only one.</td>
</tr>
<tr>
<td>Co-requisite</td>
<td>A course which must be taken along with another specified course, in order to ensure the attainment of the complementary and/or independent competencies.</td>
</tr>
<tr>
<td>Course</td>
<td>A body of knowledge circumscribed by a syllabus to be imparted to students by sundry teaching methods and usually followed by an examination. A course may be either compulsory or elective.</td>
</tr>
<tr>
<td>Credit</td>
<td>A measure of the workload required of students. 1 Credit Hour is equivalent to 1 hour lecture/tutorial/problem class per week OR 2 hours of laboratory session per week for a semester.</td>
</tr>
<tr>
<td>Cumulative GPA</td>
<td>Grade point average obtained by dividing the total grade point earned by the total quality hours for which the student has registered for any period of time excluding courses taken on a Pass/Fail basis, audited courses, courses taken for Preliminary credit, incomplete and in-progress courses.</td>
</tr>
<tr>
<td>Discipline</td>
<td>A body of knowledge distinguishable from other such bodies on the basis of criteria such as method of enquiry, axioms, area of application.</td>
</tr>
<tr>
<td>Elective</td>
<td>A course within a programme taken by choice of the student.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Faculty courses</td>
<td>All courses except Foundation and Co-curricular courses</td>
</tr>
<tr>
<td>In-faculty courses</td>
<td>All faculty courses originating in the Science Faculties</td>
</tr>
<tr>
<td>Level</td>
<td>A state in a programme for which courses are designed (at UWI it is denoted by the first digit in a course code). For example BIOL 2062 is a Level II course whereas BIOL 3864 is a Level III course.</td>
</tr>
<tr>
<td>Major</td>
<td>A specified number of credits (normally 30-33) including prescribed courses from Level II &amp; III from a single discipline (see Departmental course listing).</td>
</tr>
<tr>
<td>Marginal failure</td>
<td>35% to 39% in the overall examination.</td>
</tr>
<tr>
<td>Minor</td>
<td>A specified number of credits (normally 15 or 16) including prescribed courses from Levels II &amp; III from a single discipline</td>
</tr>
<tr>
<td>Option</td>
<td>A prescribed combination of Levels I, II and III courses, within the Faculty or across Faculties, leading to a degree.</td>
</tr>
<tr>
<td>Out-of-faculty courses</td>
<td>All faculty courses originating in faculties other that the Faculty of Science and Technology</td>
</tr>
<tr>
<td>Part</td>
<td>Portion of a programme defined by the regulations governing the programme.</td>
</tr>
<tr>
<td>Plagiarism</td>
<td>The unauthorized and/or unacknowledged use of other person’s intellectual efforts and creations howsoever recorded, without proper and unequivocal attribution of such source(s), using the conventions for attributions or citing used in this University.</td>
</tr>
<tr>
<td>Pre-requisite</td>
<td>A course which must be passed before the course for which it is required may be pursued.</td>
</tr>
<tr>
<td>Programme</td>
<td>A selection of courses (designed to achieve pedagogical goals) the taking of which is governed by certain regulations and the satisfactory completion of which (determined by such regulation) makes a candidate eligible for the award of a degree/ diploma/ certificate.</td>
</tr>
<tr>
<td>Preliminary Course</td>
<td>A Level 0 course used to satisfy entry requirements but does not contribute towards the requirements for the award of the degree.</td>
</tr>
<tr>
<td>Remedial Course</td>
<td>A course that is offered in Summer School only for students who have failed this course during the semester.</td>
</tr>
<tr>
<td>Science Faculties</td>
<td>The Faculties of Science and Technology.</td>
</tr>
<tr>
<td>Semester GPA</td>
<td>GPA computed on the basis of all courses done in a semester, without reference to weighting except in terms of credits. (The terms Grade Point, GPA, Quality Hours, Honours GPA, Cumulative GPA and Quality Points are defined in the UWI Grade Point Average Regulations Booklet).</td>
</tr>
<tr>
<td>Subject</td>
<td>An area of study traditionally assigned to the purview of a department.</td>
</tr>
<tr>
<td>Students:</td>
<td>ilon the timetable.</td>
</tr>
<tr>
<td>Part-Time Student</td>
<td>A part-time student will normally be expected to register for 6 to 9 credits of courses per semester. These courses may be scheduled at any time of the day on the timetable.</td>
</tr>
<tr>
<td>Full-time Student</td>
<td>A full-time student will normally be expected to register for 12 to 15 credits per semester.</td>
</tr>
<tr>
<td>Evening Student</td>
<td>A student registered in an Evening University Programme will be required to attend classes on weekdays between the hours of 5:00pm - 10:00pm and on Saturdays between the hours of 8:00am - 8:00pm.</td>
</tr>
</tbody>
</table>
Specially Admitted Student

Students admitted to pursue a limited number of courses.

Study Abroad/ Student

An exchange programme which allows students to spend one or two semesters at universities Exchange abroad in order to broaden their experience, understanding and perception of science in a different environment where a wider range of courses is available including independent study projects.

Supplemental Oral

An oral examination, offered on recommendation of Departments and Faculty, to students who have registered a marginal failure in an advanced course.

Weighted GPA

Weighted grade point average used to determine the class of degree. This GPA is computed on the basis of all courses done in the Advanced Part (Levels 2 & 3) of the Degree programme.

SECTION IV - FACULTY REGULATIONS

All students of the University are subject to University Regulations approved by the Senate of the UWI. Where there is conflict between the regulations of any Faculty and the University Regulations, the University Regulations shall apply.

G. QUALIFICATIONS FOR ADMISSION INTO THE FACULTY

11. In order to be admitted to the three-year degree programme, candidates must satisfy the University requirements for Matriculation (see the University Regulations for Undergraduate Students) and have passed the CSEC General Proficiency Level examination at Grades I, II or, since 1998, Grade III (or equivalent qualifications) in Mathematics, English Language and three additional subjects listed in Appendix 2.

12. Candidates must also:

(a) have obtained passes in a minimum of two two-unit subjects at CAPE (or GCE A-Level or equivalent qualification), or

(b) have an approved Associate Degree or equivalent certification with a minimum GPA of 2.5 in a relevant programme from a tertiary level institution recognised by UWI, or

(c) have any other appropriate qualifications acceptable to the FST,

13. In addition to the above general qualifications for admission, candidates must also satisfy the specific subject requirements for entry into the various FST programmes they wish to pursue. These are listed in Table 2:

H. APPLICATION PROCEDURE

14. Applications for entry to the FST must be received by the Admissions Section of the Registry by January 31st of the year in which the applicant wishes to enter and shall be accompanied by certified evidence of all relevant examinations passed. Students are encouraged to apply online at http://www.uwi.edu/students/admissions.aspx
I. LIST OF EXEMPTIONS

15. Provided that requirements to Statute 47 are fulfilled, students admitted to the FST may be exempted with or without credits from Level I and/or Level II or Level III courses if they:
   - are holders of degrees from approved universities; or
   - have partially fulfilled the requirements of such degrees; or
   - are holders of Associate Degrees from approved tertiary level institutions; or
   - have transferred from different BSc degree programmes or from other programmes of study within the University.

Application for EXEMPTIONS must be made upon entry to the Registry (Admissions Section).

16. Where EXEMPTIONS WITHOUT CREDITS are granted, students will be required to pursue alternative courses as approved by the Head of Department. The following is a list of exemptions with/without credits currently offered by the FST:

(a) COSTAATT Associate Degree Graduates in ENVIRONMENTAL MANAGEMENT:
   Students with a GPA of 2.75 or better admitted into the ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT PROGRAMME will be exempted WITH CREDIT from the following:
   - BIOL 1462
   - AGBU 1005, AGBU 1002 and AGSL 1000 (offered by the FFA)

(b) COSTAATT Associate Degree Graduates in ENVIRONMENTAL TECHNOLOGY:
   Students with a GPA of 2.75 or better admitted into the ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT PROGRAMME will be exempted WITH CREDIT from the following:
   - BIOL 1462
   - AGRI 1012, AGSL 1000, AGBU 1002 (offered by the FFA)

<table>
<thead>
<tr>
<th>TABLE 2 : CAPE (GCE A-LEVEL OR EQUIVALENT) QUALIFICATION FOR ENTRY INTO VARIOUS FST PROGRAMMES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRAMME</td>
</tr>
<tr>
<td>BSc General with majors in:</td>
</tr>
<tr>
<td>• Biochemistry</td>
</tr>
<tr>
<td>• Biology</td>
</tr>
<tr>
<td>• Chemistry</td>
</tr>
<tr>
<td>• Computer Science</td>
</tr>
<tr>
<td>• Environmental &amp; Natural Resource Management</td>
</tr>
<tr>
<td>• Mathematics</td>
</tr>
<tr>
<td>• Physics</td>
</tr>
<tr>
<td>• BSc Actuarial Science</td>
</tr>
<tr>
<td>• BSc Chemistry and Management</td>
</tr>
<tr>
<td>• BSc Computer Science</td>
</tr>
<tr>
<td>• BSc Computer Science and Management</td>
</tr>
<tr>
<td>• BSc Information Technology</td>
</tr>
</tbody>
</table>

For a list of approved science CAPE/GCE A-Level subjects, see Appendix 2.
24

(c) COSTAATT Associate Degree Graduates in ENVIRONMENTAL ENGINEERING:
Students with a GPA of 2.75 or better admitted into the ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT PROGRAMME will be exempted WITH CREDIT from the following:
• AGSL 1000 (offered by the FFA).

(d) COSTAATT Associate in Science Degree in BIOLOGY:
Students entering the Faculty with a GPA of 2.75 and above in the COSTAATT Associate in Science Degree in Biology will be exempted WITH CREDIT from the following:
• CHEM 1062, BIOL 1262, BIOL 1263, BIOL 1362, BIOL 1364 and BIOL 1462

(e) COSTAATT Associate in Science Degree in CHEMISTRY:
Students entering the Faculty with a GPA of 2.75 and above in the COSTAATT Associate in Science Degree in Chemistry will be exempted WITH CREDIT from the following:
• CHEM 1065, CHEM 1066, CHEM 1067 and CHEM 1068

(f) COSTAATT Associate in Science Degree in PHYSICS:
Students entering the Faculty with a GPA of 2.75 and above in the COSTAATT Associate in Science Degree in Physics will be exempted WITH CREDIT from the following:
PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 and PHYS 1216.

(g) Students who have The UWI ROYTEC Associate Degree in Information Systems Management (ADISM) with a minimum GPA of 2.50 will be accepted for entry without exemption/credits into the following programmes:
• BSc General (Major/Minor (Computer Science)
• BSc Computer Science
• BSc Computer Science and Management
• BSc Information Technology

(h) UWI ROYTEC Associate Degree in Information Systems Management (ADISM).
Students with a GPA of 2.75 or better admitted into the BSc INFORMATION TECHNOLOGY programme will be exempted with credits from the following courses:
INFO 1500, INFO 1501, INFO 1502, INFO 1503, INFO 1504, INFO 1505, INFO 1506, INFO 1507.

and will be permitted to register for Level II courses:

J. REGISTRATION
17. (a) A student pursuing a degree in the FST may register as a full-time student or as a part-time student or as an Evening University student. A student may apply to change his/her status during the tenure of the degree.

(b) A student who is in full-time employment may pursue a degree as a part-time student or as an Evening University student only.

(c) Full-time students may take up employment for not more than 12-hours per week without losing their full-time status. A student who is employed for more than 12-hours per week shall be registered as a part-time or an Evening University student.

(d) A full-time student is normally expected to register for 12 to 15 credits per semester at Level I and 12 to 16 credits per semester at Levels II/III.

(e) A part-time student is normally expected to register for 6 to 9 credits per semester offered under the day programme.

(f) An Evening University student is normally expected to register for 6 to 9 credits per semester at Level I and 6 to 12 credits per semester at Levels II/III.

18. (a) Students must register for courses that they wish to pursue by the dates prescribed by the Campus Registrar.
(b) Changes to registration (add/drop courses) will be permitted only within the prescribed periods at the start of Semesters I and II. (Refer to the Campus Web Site and Notice Boards for actual dates)

(c) A student’s registration for a course is complete only after his/her financial obligations to the University have been fulfilled.

19. (a) Registration for any course constitutes registration for the associated examination. A student will therefore have failed the course if s/he does not attend the examination without having previously been allowed to withdraw from the course or without having tendered evidence of illness at the time of the examination, certified by a medical practitioner recognised by the University. In the latter case, the medical report must reach the Campus Health Service Unit (HSU) no later than seven days after the date of the relevant examination.

(b) Medical Certificate/Report forms are available online at http://sta.uwi.edu/onlineForms.asp

(c) In cases where the medical submitted for a missed coursework examination is approved by the Campus HSU, the candidate shall be granted a substitute coursework examination at a date prescribed by the relevant Department.

(d) In cases where the medical submitted for a missed final examination is approved by the Campus HSU, the grade designation of AM (Absent Medical) will apply provided that the student has passed the coursework in that particular course. The designation AM carries no penalty.

20. (a) A student who has passed a course will not be permitted to re-register for that course.

(b) A student may not be allowed to register for a course on the grounds of repeated failure or poor performance in that course.

K. PROGRESS THROUGH THE PROGRAMME

21. (a) Students admitted to the three-year programme, in addition to registering for the required Level 1 courses, may also register for a maximum of 12 credits in ONE of the Preliminary courses offered (Biology, Chemistry, Mathematics or Physics) for the purpose of obtaining pre-requisites for entry into a programme of choice. However, the total permissible credit loading per semester must not be exceeded.

(b) Students may not register for preliminary courses in a subject which overlaps substantially with CAPE/GCE A-Level courses (or equivalent) previously passed.

(c) Full-time students are required to register for Level I Faculty courses equivalent to a MINIMUM of twelve credits, per semester.

(d) Part-time students are required to register for courses equivalent to a MINIMUM of 6 credits per semester.

(e) Evening University students are required to register for courses equivalent to a MINIMUM of 6 credits per semester.

(f) In order to satisfy the minimum requirement for entry to the advanced part of the programme (Level II and III), a student must normally record passes in Level I courses equivalent to a minimum of twenty-four (24) credits of Faculty courses.

(g) A student who has obtained passes in Level I Faculty courses equivalent to twelve (12) credits in the first two (2) semesters of full-time study may, on the approval of the Dean, be allowed to register for a limited number of Level II courses in addition to those courses required to complete Level I requirements. However, the total credit loading per semester must not be exceeded.

(h) Full-time students who require NOT MORE THAN TWENTY (20) CREDITS in order to graduate, who have satisfied all Foundation course requirements, and are exempted from laboratory coursework in at least one course, may be allowed to register for twenty (20) credits of Faculty courses with the permission of the Dean.
L. STUDY ABROAD/EXCHANGE PROGRAMMES

22. UWI students, while at exchange Universities, will continue as regular full-time students of the University of the West Indies. Such students will pay UWI tuition fees and pursue matching and/or approved courses for credit. Credits earned abroad will be transferred to UWI and applied to regular Faculty degree requirements in accordance with Regulations 47.

23. (a) FST students who wish to participate in an exchange programme at an approved institution and desire to have the credits obtained used toward a UWI degree, must obtain written approval in advance from the Dean and register for equivalent courses offered by FST. Failure to do so may preclude the acceptance of the credits earned at the exchange institution.

(b) Students must normally have a minimum Cumulative GPA of 3.0 and have spent at least two semesters of full-time study at UWI to qualify for the Exchange Programme.

(c) Where the course to be taken is to be substituted for a UWI course, the content of the course must be certified in advance by the relevant Department as being equivalent to the UWI course. Course outlines and syllabuses must be provided by the student in order to facilitate the evaluation process.

(d) Only grades earned at the exchange institution and not the marks shall be used in the computation of the student's GPA.

Students are advised to visit the website of the Office of Institutional Advancement and Internationalization (International Office) for a current list of Universities with which UWI has entered into cooperative arrangements for study exchanges at http://sta.uwi.edu/international/ or contact:

The Director
Office of Institutional Advancement and Internationalization
The University of the West Indies
St. Augustine Campus
Trinidad and Tobago, W.I.
Tel: 663-3348 Exts. 84184, 84151
Fax: (868) 662-6930
Skype: uwi-sta-lo
e-mail: internationaloffice@sta.uwi.edu

M. EXAMINATIONS

24. In order to pass a course, a student must have satisfied the examiners in the associated examinations and must have attended at least 75% of classes associated with that course.

25. The Academic Board on the recommendation of the Faculty Board concerned, may debar a student from writing the examination associated with a course, based on attendance of less than 75% at lectures/laboratory classes/tutorials. The designation recorded for such a candidate in that course will be DB (debarred).

26. The examination associated with each course shall be conducted mainly by means of written and/or practical papers, normally taken at the end of the semester. However, oral examinations as well as performance in coursework in the form of essays, in-course tests, research papers, projects, or continuous assessment of theoretical and/or practical work may contribute towards the final grade awarded in a course. (Refer to individual course outlines and the Departments for the specific modes of assessment and their weightings)

27. When practical papers and/or practical coursework contribute towards an examination, candidates must satisfy the examiners in both the theoretical and practical aspects of the course (unless specified otherwise). On the basis of performance in the practical part of the course, students may, on the recommendation of the Department concerned, be exempted from the practical part of the final examination.

28. (a) A student may be granted supplemental oral examinations in failed Level II/III courses accounting for not more than eight (8) credits provided that the student has completed all level I requirements and passed a minimum of 30 levels II/III credits.

(b) Students passing such oral examinations will be awarded the minimum pass mark of 40% (Grade D, Quality Point 1.0) and will not have any right of appeal or review of the outcome.

(c) Students offered oral examinations may choose to decline the offer.

29. A student who fails the examination associated with a course may be given permission to repeat the course and the examination on subsequent occasions.
30. In the event that such a student has satisfied the examiners in the practical coursework component of the failed course, the candidate may, on the recommendation of the relevant Department, be exempted from the laboratory coursework.

31. A Remedial course in FST offered as part of the Summer School Programme is considered a repeat of the course.

**N. PLAGIARISM DECLARATION**

32. A declaration must be made in accordance with the University Regulations on Plagiarism (First Degrees, Diplomas and Certificate) and must be attached to all work submitted by a student to be assessed as part of, or the entire requirement of the course, other than work submitted in an invigilated examination. By signing this declaration, a student is declaring that the work submitted is original and that it does not contain any plagiarised material. See Appendix 3 at the back of this booklet for the Plagiarism Declaration and the University’s Regulations regarding Plagiarism.

**O. GENERAL REQUIREMENTS FOR THE AWARD OF THE DEGREE**

33. In order to be eligible for the award of the BSc degree in FST, students must have:

   i. been in satisfactory attendance for a period equivalent to at least six (6) semesters of full-time study from entry at Level I

   ii. obtained passes in Levels I, II and III and Foundation Courses amounting to the number of credits shown in TABLE 3.

   iii. a minimum Weighted Grade Point Average of 1.00.

   iv. the minimum 93 credits required for the award of a BSc General Degree, a MINIMUM of 24 Level I credits of which 12 must be FST credits and at least a major from FST, or

   v. a minimum of two years of full-time study and 60 credits provided that they possess qualifications from another recognised tertiary level institution.

Please note carefully that the credit requirement for the award of the BSc degrees varies depending upon the programme you are pursuing.

---

**TABLE 3: CREDIT REQUIREMENT FOR THE VARIOUS DEGREES**

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>LEVEL I CREDITS</th>
<th>LEVEL II - III CREDITS</th>
<th>FOUNDATION COURSES CREDITS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc (General) with majors/minors</td>
<td>24</td>
<td>60</td>
<td>9</td>
<td>93*</td>
</tr>
<tr>
<td>BSc (Options):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSc Actuarial Science</td>
<td>30</td>
<td>65</td>
<td>9</td>
<td>104</td>
</tr>
<tr>
<td>BSc Chemistry and Management</td>
<td>24</td>
<td>63</td>
<td>9</td>
<td>96</td>
</tr>
<tr>
<td>BSc Computer Science</td>
<td>24</td>
<td>60</td>
<td>9</td>
<td>93</td>
</tr>
<tr>
<td>BSc Computer Science and Management</td>
<td>30</td>
<td>60</td>
<td>9</td>
<td>99</td>
</tr>
<tr>
<td>BSc Information Technology</td>
<td>24</td>
<td>60</td>
<td>9</td>
<td>93</td>
</tr>
</tbody>
</table>

*NB: This is the MINIMUM REQUIREMENT and may vary depending upon the credit requirements for the major/minor you are pursuing
34. Students will be granted credits only once for the same course offered under different majors/minors. In such cases students will be required to pursue alternative courses which must be approved by the Dean.

35. Exemptions from specific parts of the degree programme may be obtained under the provision of Regulations 15 and 16.

P. DECLARATION OF MAJORS, MINORS AND SPECIAL OPTIONS

36. (a) Students are required to register for a major/special option upon initial entry into the Faculty. However, students may request a change in major/minor/option as they progress along their degree. Students desirous of pursuing majors in a Faculty other than FST must apply for and obtain official approval from that Faculty before pursuing such majors.

(b) Students must make a final declaration of their proposed majors/minors/special options by the end of the registration period of the semester in which they intend to graduate.

(c) Students who have met the requirements for the degree for which they have registered/declared may not register for further courses in pursuit of that degree.

Q. TIME LIMITS FOR COMPLETION AND ENFORCED WITHDRAWALS

37. (a) A Semester grade point average (GPA) based on grades earned on all approved courses for which the student is registered in a semester, will be used as the basis for the determination of his/her academic standing.

(b) A student whose GPA in any Semester is less than 1.00 will be placed on warning.

(c) A Dean’s Hold will be placed on a student on warning. Such a student will have to seek academic advising from the Dean before the Dean’s hold can be removed. This MUST be done within the prescribed registration period at the start of the Semester. A reduced academic load may be recommended,

(d) A STUDENT WHO IS ON WARNING AND WHO FAILS TO OBTAIN A SEMESTER GPA OF AT LEAST 1.00 IN THE SUCCEEDING SEMESTER WILL BE REQUIRED TO WITHDRAW FROM THE FACULTY.

38. For the purposes of Regulation 39 below, any semester in which a student is registered part-time, will be counted as half of a semester of full-time study.

39. (a) Full-time students will normally be required to complete the requirements for the degree in a minimum of six or a maximum of ten semesters of full-time study.

(b) Students who do not complete the programme within the maximum period stated in Regulation 39 (a) above will normally be required to withdraw from the Faculty at the end of the academic year in which the maximum time limit is reached.

40. In the event that a student has exhausted the maximum period stated in Regulation 39(a), but still requires for the completion of the degree programme:

(a) passes in courses totaling no more than eight (8) credits,

and/or

(b) passes in Foundation courses only,

Approval would be sought from the Board for Undergraduate Studies for an extension of the period of study by one or two consecutive semesters.

41. For the purposes of Regulation 39(a) any semester for which a student has obtained Leave of Absence from the Faculty shall not be counted.

42. A student who was required to withdraw for reasons of failure to progress may be re-admitted to the Faculty on the following conditions:

(a) A minimum of two consecutive semesters has elapsed since the date of withdrawal.

(b) The FST is satisfied that the contributing circumstances for the withdrawal have altered substantially.

(c) All grades previously obtained, (except those for courses that have been deemed outdated), shall continue to apply for the purpose of determining the student’s GPA.

(d) Courses pursued in the UWI Summer School during the period of withdrawal shall be included in all relevant grade point average calculations if the student re-enters the Faculty.
43. (a) A student who was required to withdraw from the Faculty MUST APPLY for re-entry by the date prescribed by the Campus Registrar. A student will not be admitted before a year has elapsed. Application for re-entry must be done prior to the deadline for applications as follows:

(b) A student who is required to withdraw at the end of Semester I of an academic year must reapply by 15th December of the following academic year for readmission in Semester II of that academic year.

(c) A student who is required to withdraw at the end of Semester II of an academic year must reapply by 30th January of the following academic year for readmission in Semester I of that academic year.

(d) A student who was required to withdraw and was re-admitted and then required to withdraw for a second time, will not normally be considered for re-admission again until a minimum period of five years has elapsed.

44. (a) A student who wishes to be absent from the Faculty for a semester or more may apply ONLINE for Leave of Absence.

(b) Leave of Absence will not be granted for more than two consecutive semesters in the first instance. However, students may apply for an extension of Leave of Absence.

(c) Leave of Absence will not be granted for more than two consecutive years.

(d) Applications for Leave of Absence should normally be submitted no later than the end of the prescribed change in registration period in the relevant semester.

45. A student who does not register for any course during a semester without having obtained Leave of Absence will be deemed to have withdrawn from the University and will have to re-apply for entry to the University if s/he so desires.

46. A student who voluntarily withdraws from the University and then applies for re-admission within five (5) years shall be granted exemption and credit for all courses previously passed unless the Department concerned declares that the material covered in a course has become outdated. All grades previously obtained except those for courses declared outdated shall be used in the determination of the GPA of such a student.

S. GPA AND CLASS OF DEGREE AWARDED

47. (a) All students in the FST, irrespective of their date of entry into the FST, are subject to the current GPA regulations.

(b) A Cumulative Grade Point Average based on all courses completed for which grades have been obtained (excluding Preliminary courses, those taken on a Pass/Fail basis, audited courses and courses designated I or IP), will be calculated and recorded on the student’s transcript.

(c) A Weighted Grade Point Average based on grades obtained on ALL LEVELS II AND III COURSES registered for, including all courses in the declared major(s)/minor(s)/option whether passed or failed, will be used in the calculation for determination of the class of the degree. (See Regulations 48 and 49) for the relationship between marks, Grade Point Average and Class of Honours).

(d) First Class Honours, Second Class Honours (Upper and Lower Division), or a Pass degree will be awarded on the basis of the Weighted Grade Point Average (GPA) of all Level II/III courses taken (passed and failed).
T. GRADING SCHEME

48. The Grading Scheme used in the FST is as follows:

<table>
<thead>
<tr>
<th>Mark</th>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-100</td>
<td>A+</td>
<td>4.3</td>
</tr>
<tr>
<td>70-85</td>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>67-69</td>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>63-66</td>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>60-62</td>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>57-59</td>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>53-56</td>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>50-52</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>47-49</td>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>43-46</td>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>40-42</td>
<td>D</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Minimum pass grade is a D with a quality point of 1.0.

U. CLASS OF HONOURS

49. A student’s class of degree will be based on his/her Weighted Grade Point Average (GPA) as follows:

<table>
<thead>
<tr>
<th>Honours</th>
<th>Weighted GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>3.60 – 4.3</td>
</tr>
<tr>
<td>Upper Second</td>
<td>3.0 – 3.59</td>
</tr>
<tr>
<td>Lower Second</td>
<td>2.0 – 2.99</td>
</tr>
<tr>
<td>Pass</td>
<td>1.0 – 1.99</td>
</tr>
</tbody>
</table>

V. AEGROTAT DEGREE

50. (a) A candidate who, by virtue of illness, was prevented from attending examinations or part of the examinations associated with one or more Level II/III courses in the year of anticipated graduation may apply to the Board for Undergraduate Studies through the University Registrar for an Aegrotat pass in the course. Such an application will only be granted if all the following conditions are satisfied:

i. The relevant Head of Department reports that, on the basis of the candidate’s performance during the period preceding the examinations, the candidate was expected to pass the examinations concerned and has satisfactorily completed any associated coursework.

ii. The application reaches the University Registrar not later than thirty (30) days after the date of the last paper in the examination concerned.

iii. The application is accompanied by a medical certificate attesting to the illness and issued by a medical practitioner recognised for this purpose by the University.

(b) No grade will be awarded in respect of an Aegrotat pass, and a candidate, having been awarded an Aegrotat pass, will not be allowed to re-enter the examination for the course concerned on a subsequent occasion. An Aegrotat pass may not be used to satisfy a Prerequisite for other Level II/III courses.

(c) A candidate, having satisfactorily completed the degree programme, who includes Aegrotat passes in courses counted for the degree programme, will be eligible for the award of an Aegrotat degree, provided that both of the following conditions are satisfied:

i. the courses in which the Aegrotat passes have been granted (and which need to be counted towards the award of the degree) are equivalent to no more than twenty-four (24) credits.

ii. no more than sixteen (16) credits mentioned in c (i) above arise from courses making up the candidate’s major.

(d) The Aegrotat degree will be awarded without Honours.
SECTION V - REGULATIONS GOVERNING THE FST SUMMER SCHOOL PROGRAMME

The FST generally offers remedial courses for students who are repeating laboratory-based and/or non laboratory-based courses during the Summer School. The FST may also offer a limited number of full courses that are non laboratory-based in the Summer School. The maximum number of credits for which a student may register in Summer School is normally nine (9).

1. ELIGIBILITY FOR ADMISSION TO THE SUMMER SCHOOL PROGRAMME
   The following categories of students are eligible for admission to the Summer School Programme:
   a. Registered students of the University who have to repeat any of the course(s) offered.
   b. Registered students of the University who have not taken the course(s) previously but fall into one of the following categories:
      • Students of the University who have not yet completed the requirements for the degree, diploma or certificate programme for which they are registered.
      • Registered UWI students from other UWI campuses.
   c. Students of the University who have been granted (a) leave of absence for Semester 1 and/ or 2 preceding the Summer School Programmes, or (b) permission to Write “Examinations Only”, or (c ) who have been asked to withdraw and are desirous of continuing with their programme of study
   d. Other persons, not students of the University, who are eligible to matriculate at either the normal or lower level or as a mature student

2. APPLICATIONS
   Please visit the Campus Website for further information.

3. FEE PAYMENT
   Students will be required to pay a fee for each course registered for in the Summer School Programme. This fee is subject to change. Please visit the university website for current fees

4. ATTENDANCE
   MINIMUM ATTENDANCE of 75% of Lectures/Tutorials is required. Attendance at laboratory classes/field trips is compulsory

5. COURSE SELECTION AND REGISTRATION
   Persons desirous of pursuing courses in the Faculty’s summer programme are required to visit the website at http://www.sta.uwi.edu/ or consult the Faculty Notice Boards and timetables for a list of courses being offered in the Summer School Programme before registering.

6. LATE REGISTRATION
   a. Students may be permitted to register up to the end of the 2nd week of the start of the Summer School Session on payment of an additional late registration fee of TT$150.
   b. In cases where examination results for Semester II are declared after May 31, students may be permitted to register up to the end of the 2nd week of the start of the Summer School session.
   c. Summer School students may apply for a change of registration by no later than the end of the 2nd week of the start of the Summer School session.

7. EXAMINATIONS & COURSE LOADS
   a. Examinations for courses taught in the Summer School shall be conducted in accordance with the University Examination Regulations.
   b. Summer School students shall write the University Examinations appropriate to the course(s) for which they are registered.
   c. Students shall not normally be permitted to register for more than THREE one-semester courses (usually 9 credits) in any given Summer School Session. Students are advised to check the timetable before registering.

Return to Table of Contents
d. Finalising students may apply, to the Faculty Dean to pursue up to a maximum of 12 credits.

e. A student is deemed as finalising if that student has only a maximum of 12 credits left to complete the degree/certificate/diploma requirement.

f. Students may request permission to carry forward coursework marks for courses pursued in Semester I and/or II to the Summer Programme.

g. All such requests must be submitted, through the Faculty Dean, to the Assistant Registrar, Student Affairs (Admissions) before the student is allowed to register.

NOTE: Registration for a course offered in the Summer School implies registration for the examination of that course.

7. AWARD OF CREDITS

a. Credits for courses successfully completed in the Summer School shall be granted to registered students of the University including those on approved leave of absence.

b. Persons wishing to pursue a course(s) to be considered as ‘Not for Credit” (NFC) must seek approval prior to registering for the course. All such requests must be made, in writing, or on the required form, to the Dean of the Faculty. Students will not subsequently have such credit altered.

c. Summer School students who have not been offered a place at the University have no automatic right of acceptance into any Faculty of the University.

d. Persons who are accepted into the University may be granted credit/exemption for courses successfully completed in the Summer School provided that five (5) year have not elapsed since the completion of the relevant course(s).

e. Students who do not satisfy normal matriculation may not use the credits gained in the Summer School for both matriculation and degree purposes.

8. APPLICATION FOR WITHDRAWAL

a. Students may withdraw from a course by applying to the Assistant Registrar (Admissions) in writing and copying the Faculty Dean or Summer School Coordinator. The student should clearly state the reasons for the withdrawal and complete the required application form for refund where applicable.

b. Applications for withdrawal from a course must reach the Assistant Registrar (Admissions) no later than two (2) weeks after teaching has begun. Students, who wish to withdraw from a course after the deadline date, must apply to Academic Board, through their respective Faculty Office.

9. REFUND POLICY

a. A refund penalty is charged as follows:
   i. No penalty before May 30th, 2013
   ii. 25% of tuition fees up to June 2, 2013 (up to the end of the 1st week of teaching)
   iii. 30% of tuition fees up to June 9, 2013 (up to the end of the 2nd week of teaching)

10. PAYMENT OF FEES

a. Part payment of fees is NOT allowed

b. Fees must be paid at any Branch of Republic Bank Ltd. using the bank deposit slip provided

c. Registration in the summer session will carry a non-refundable registration fee

d. Courses not dropped by the deadline date will be counted and the student would be billed accordingly.

e. Late registration fee/late payment penalty includes the registration fee PLUS the Late Registration fee/late payment penalty.
SECTION VI - PRIZES

A number of prizes are offered on an annual basis to students in the Faculty based on outstanding academic performance. The following is a list of such prizes. Note that this list is subject to alteration.

FACULTY PRIZES

These prizes are awarded to all First Class Honours students within the Faculty by the Office of the Dean.

DEPARTMENT OF CHEMISTRY

THE WESTERN SCIENTIFIC PRIZE
Awarded for the best Year I performance in Chemistry

THE BERGER PAINTS TRINIDAD LTD. PRIZE
Awarded for the best Year II performance in Chemistry

THE CHROMASPEC LTD. PRIZE
Awarded for the best Year II performance in Chemistry & Management

THE INDUSTRIAL GASES LTD. PRIZE
Awarded for the best Year III performance in Chemistry

THE SOUTHERN SYSTEMS LTD. PRIZE
Awarded for the best graduating student in Chemistry

THE PERKIN ELMER/SCALAR SCIENTIFIC PRIZE
Awarded for the best performance in Analytical Chemistry

THE WESTERN SCIENTIFIC PRIZE
Awarded for the best Year III performance in Chemistry & Management

THE CHERYL BOWLES CHALLENGE TROPHY PRIZE
Awarded for the best Final Year Analytical Chemistry Project

THE ANIL DEISINGH PRIZE
Awarded for the best Graduating Student entering the Chemistry Postgraduate Programme

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

THE IBM WORLD TRADE CORPORATION PRIZE
Awarded for the best Year I performance in Computer Science

THE bp TRINIDAD & TOBAGO LLC PRIZE
Awarded for the best Year I performance in Information Technology

THE TUCKER ENERGY SERVICES HOLDINGS LTD. PRIZE
Awarded for the best Year II performance in Computer Science

THE RBC ROYAL BANK OF TRINIDAD & TOBAGO LTD. PRIZE
Awarded for the best Year II performance in Information Technology

THE FUJITSU TRANSACTION SOLUTION LIMITED PRIZE
Awarded for the best Year III performance in Computer Science

THE digi data SYSTEMS LTD. PRIZE
Awarded for the best Year III performance in Information Technology

ATLANTIC CO. OF TRINIDAD AND TOBAGO PRIZE
Awarded to the most outstanding graduate: B.Sc. General (Major in Computer Science)

DR MARGARET BERNARD MEDULLAN AWARD
Awarded to the graduate in Computer Science with the highest GPA

DEPARTMENT OF LIFE SCIENCES

PLANT SCIENCE
THE PROFESSOR E.J. DUNCAN PRIZE
Awarded for the best Research Project in Plant Science

BIOCHEMISTRY
THE BRYDEN PI CARIBBEAN PRIZE
Awarded for the best Year II performance by a student majoring in Biochemistry

THE ANGOSTURA LIMITED PRIZE
Awarded for the best Year III performance by a student majoring in Biochemistry
BIOLOGY
THE REPUBLIC BANK LTD. PRIZE
Awarded for the best Year I performance in Biology

THE NEAL AND MASSY PRIZE
Awarded for the best Year II performance in Biology

THE NEAL AND MASSY PRIZE
Awarded for the best Year III performance in Biology

THE SEETERRAM BOOK CENTRE PRIZE
Awarded for the best overall performance in Biology – Book Voucher Prize

ENVIRONMENTAL & NATURAL RESOURCE MANAGEMENT
THE ASA WRIGHT NATURE CENTRE-JULIAN DUNCAN PRIZE
Awarded for the best Year I performance in Environmental & Natural Resource Management

THE ASA WRIGHT NATURE CENTRE – THOMAS CARR PRIZE
Awarded for the best Year II performance in Environmental & Natural Resource Management

THE ASA WRIGHT NATURE CENTRE – IAN LAMBIE PRIZE
Awarded for the best Year III performance in Environmental & Natural Resource Management

THE ENVIRONMENTAL MANAGEMENT AUTHORITY (EMA) PRIZE
Awarded for the Best Research Project

SPECIAL PRIZE:
THE JULIAN KENNY PRIZE IN NATURAL HISTORY
Awarded to the final year undergraduate student majoring in a Life Science discipline and displaying a strong interest in Natural History

DEPARTMENT OF MATHEMATICS & STATISTICS
THE POWERGEN PRIZE
Awarded for the best Year I performance in Mathematics

THE GUARDIAN LIFE OF TRINIDAD & TOBAGO PRIZE
Awarded for the best Year II performance in Mathematics

THE TATIL GROUP PRIZE
Awarded for the best Year III performance in Mathematics

THE WINSTON A. RICHARDS PRIZE IN STATISTICS
Awarded for the best Year II and Year III performance in Statistics

DEPARTMENT OF PHYSICS
THE RUSSELL BARROW MEMORIAL PRIZE IN ASTRONOMY
Awarded to the student showing the most initiative and effort in Astronomy outside the formal classroom

THE VICAR ENTERPRISES LIMITED PRIZE
Awarded for the best Year I performance in Physics

THE AZAD W. HARRIPAUL PRIZE
Awarded to the student with the highest marks in the level II of the programme for the course PHYS 2290

THE BERGER PAINTS TRINIDAD LTD. PRIZE
Awarded for the best Year II performance in Physics

THE DEVRA SHARMA PRIZE
Awarded for the best performance in Modern Physics I

THE P.C.S. NITROGEN PRIZE
Awarded for the best Year II performance in Material Science

THE ANTHONY CAMPBELL MEMORIAL AWARD
Awarded for the best performance in the final year Research Project

THE TRINIDAD AGGREGATE PRODUCTS PRIZE
Awarded for the best performance in Ceramics

THE CARIRI PRIZE
Awarded for the best performance in Optics & Astronomy Course

THE BRUNO MITCHELL PRIZE
Awarded for the best performance in Optics & Astronomy Course

DIAGNOSTIC NUCLEAR MEDICINE LTD. PRIZE
Awarded to the most outstanding student In Further Medical Physics
# SECTION VII - PROGRAMME OUTLINES
## DEPARTMENT OF CHEMISTRY

List of Courses Offered in the Department of Chemistry for the 2012/2013 academic year.

### SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0060</td>
<td>Preliminary Chemistry I</td>
<td>0</td>
</tr>
<tr>
<td>CHEM1060</td>
<td>Introductory Chemistry I (Remedial Only)</td>
<td>6</td>
</tr>
<tr>
<td>CHEM1061</td>
<td>Introductory Chemistry II (Remedial Only)</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 1065</td>
<td>Introduction to Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1066</td>
<td>Introduction to Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1062</td>
<td>Basic Chemistry for Life Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2160</td>
<td>Main Group Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2360</td>
<td>Basic Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2025</td>
<td>Kinetics &amp; Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3162</td>
<td>Chemistry of Metal-Catalyzed Transformations</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3267</td>
<td>Basic Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3268</td>
<td>Chemistry of Natural Products</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3467</td>
<td>Basic Analytical Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 3560</td>
<td>Environmental Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3561</td>
<td>Introduction to Polymer Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3660</td>
<td>Research Project</td>
<td>4</td>
</tr>
</tbody>
</table>

### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 0061</td>
<td>Preliminary Chemistry II</td>
<td>0</td>
</tr>
<tr>
<td>CHEM 1067</td>
<td>Introduction to Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1068</td>
<td>Introduction to Chemistry III</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2015</td>
<td>Spectroscopy</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2260</td>
<td>Basic Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2460</td>
<td>Principles of Chemical Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3163</td>
<td>Chemistry of Technologically Important Materials</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3167</td>
<td>Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3269</td>
<td>Organic Synthesis</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3367</td>
<td>Thermodynamics &amp; Statistical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3468</td>
<td>Advanced Analytical Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 3562</td>
<td>Corrosion Science</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3569</td>
<td>Industrial Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3660</td>
<td>Research Project</td>
<td>4</td>
</tr>
</tbody>
</table>

**Please note:**

I. Preliminary Chemistry I (CHEM 0060) and II (CHEM 0061) are taught by The Open Campus (formerly the School of Continuing Studies). These courses are not counted towards a student’s credit requirements for the BSc degree. However these courses can be used as pre-requisites for other courses/programmes.

II. a. Basic Chemistry for Life Sciences (CHEM 1062) is offered for students who have little exposure to Chemistry and intend to pursue studies in Agriculture, Human Ecology and the Life Sciences.

   b. However CHEM 1062 cannot be done in conjunction with CHEM 1060 and/or CHEM1061 or CHEM 1065, CHEM 1066, CHEM 1067 and CHEM 1068 or CHEM 0060 and CHEM 0061.

III. Students who have already passed Chemistry at, CAPE (Units 1 and 2), GCE A Level or Preliminary Chemistry (CHEM 0060 and CHEM 0061) or equivalent at UWI will be exempted from CHEM 1062 (Basic Chemistry for Life Sciences).

IV. For all Preliminary, Level I and Level II Chemistry courses (unless otherwise stated) Practical work will be assessed throughout the semester and will contribute to the candidate’s final mark.

   a. N.B. Students will be debarred from writing the final examination if they have not attended, completed and handed in lab reports for at least 75% of the laboratory experiments.

V. Students entering in the academic year 2012/13 will be required to pursue four (4) Level I courses: CHEM1065, CHEM1066, CHEM1067 and CHEM1068 (3 credits each) - see listing above. These courses have replaced the two (2) Level I courses CHEM1060 and CHEM1061 (6 credits each).

VI. Students repeating CHEM1060 (Introductory Chemistry I) or CHEM1061 (Introductory Chemistry II) which are no longer being taught can register during the registration period for either one of these courses. Any student who has also failed the lab component of either one of these courses must notify the Head of Department. Students who have failed CHEM1060 and CHEM1061 will be required to register for the new Level I courses: CHEM1065, CHEM1066, CHEM1067 and CHEM1068 (see listing above).
VII. Chemistry majors will be required to pursue a Final Year Research Project course (96 hours) - in either Semester 1 or 2.

VIII. The courses CHEM3560 (Environmental Chemistry) and CHEM3569 (Industrial Chemistry) have restricted enrollment. Entry into these courses is highly competitive and selection will be based on students’ academic records. Students interested in pursuing these courses are required to complete an application form, available from the Chemistry General Office, the semester before the course is due to run.

Major in Chemistry
(33 CREDITS)

COURSE LISTING
PREREQUISITE LEVEL I COURSES
LEVEL I

SEMESTER 1
Course Code Course Title Credits
CHEM 1060 Introductory Chemistry I (Remedial Only) 6
CHEM 1061 Introductory Chemistry II (Remedial Only) 6
OR
CHEM 1065 Introduction to Chemistry Laboratory 3
CHEM 1066 Introduction to Chemistry I 3

LEVEL I
SEMESTER 2
Course Code Course Title Credits
CHEM 1067 Introduction to Chemistry II 3
CHEM 1068 Introduction to Chemistry III 3

CORE COURSES
LEVEL II
SEMESTER 1
Course Code Course Title Credits
CHEM 2025 Kinetics & Mechanism 4
CHEM 2160 Main Group Chemistry 4
CHEM 2360 Basic Physical Chemistry 4

SEMESTER 2
Course Code Course Title Credits
CHEM 2015 Spectroscopy 4
CHEM 2260 Basic Organic Chemistry I 4

LEVEL III
SEMESTER 1 OR 2
Course Code Course Title Credits
CHEM 3660 Research Project 4

PLUS
(i) Either nine (9) credits of Level III courses from List 1

LIST 1
SEMESTER 1
Course Code Course Title Credits
CHEM 3267 Basic Organic Chemistry II 3

SEMESTER 2
Course Code Course Title Credits
CHEM 3167 Advanced Inorganic Chemistry 3
CHEM 3367 Thermodynamics & Statistical Thermodynamics 3

(ii) OR alternatively any six (6) credits from List 1 above AND at least three (3) credits from List 2 below

LIST 2
ELECTIVES
The following electives are also offered by the Department

SEMESTER 1
Course Code Course Title Credits
CHEM 3162 Chemistry of Metal-Catalyzed Transformations 3
CHEM 3268 Chemistry of Natural Products 3
CHEM 3467 Basic Analytical Chemistry 6
CHEM 3560 Environmental Chemistry 4
CHEM 3561 Introduction to Polymer Chemistry 4

SEMESTER 2
Course Code Course Title Credits
CHEM 3163 Chemistry of Technologically Important Materials 3
CHEM 3269 Organic Synthesis 3
CHEM 3468 Advanced Analytical Chemistry 6
CHEM 3562 Corrosion Science 4
CHEM 3569 Industrial Chemistry I 4
Minor in Chemistry
(16 CREDITS)

**COURSE LISTING**

**CORE COURSES (12 CREDITS)**

**LEVEL II**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 2160</td>
<td>Main Group Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 2360</td>
<td>Basic Physical Chemistry</td>
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**LEVEL II**

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 2260</td>
<td>Basic Organic Chemistry I</td>
<td>4</td>
</tr>
</tbody>
</table>

**ELECTIVES (4 CREDITS)**

One course from the following:

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 2025</td>
<td>Kinetics &amp; Mechanism</td>
<td>4</td>
</tr>
</tbody>
</table>

Minor in Analytical Chemistry
(16 CREDITS)

Chemistry Majors can also pursue a minor in Analytical Chemistry by taking the following additional courses. For these students, only one Research Project CHEM 3660 will be required (see MAJOR IN CHEMISTRY). PLEASE NOTE THAT A MINOR IN ANALYTICAL CHEMISTRY CAN ONLY BE PURSUED IN CONJUCTION WITH THE MAJOR IN CHEMISTRY.

**COURSE LISTING**

**LEVEL II**

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 2460</td>
<td>Principles of Chemical Analysis</td>
<td>4</td>
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</table>

**LEVEL III**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 3467</td>
<td>Basic Analytical Chemistry</td>
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**LEVEL III**

<table>
<thead>
<tr>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 3468</td>
<td>Advanced Analytical Chemistry</td>
<td>6</td>
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</tbody>
</table>

Minor in Applied Chemistry
(16 CREDITS)

Chemistry majors can also pursue a minor in Applied Chemistry by pursuing the following additional courses. PLEASE NOTE THAT A MINOR IN APPLIED CHEMISTRY CAN ONLY BE PURSUED IN CONJUCTION WITH THE MAJOR IN CHEMISTRY.

**COURSE LISTING**

**LEVEL III**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>CHEM 3560</td>
<td>Environmental Chemistry</td>
<td>4</td>
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<tr>
<td></td>
<td>CHEM 3561</td>
<td>Introduction to Polymer Chemistry</td>
<td>4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>CHEM 3562</td>
<td>Corrosion Science</td>
<td>4</td>
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<tr>
<td></td>
<td>CHEM 3569</td>
<td>Industrial Chemistry I</td>
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</table>

BSc Chemistry and Management

The course requirements for the BSc Chemistry and Management are as follows: (PLEASE SEE APPENDIX 1 which outlines the specific prerequisites for the Management courses pursued by Chemistry and Management students.)

**COURSE LISTING (FOR STUDENTS UNDER THE OLD SYSTEM)**

**(a) LEVEL I**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACCT 1002</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1060</td>
<td>Introductory Chemistry I (Remedial)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CHEM 1061</td>
<td>Introductory Chemistry II (Remedial)</td>
<td>6</td>
</tr>
<tr>
<td>OR</td>
<td>CHEM 1065</td>
<td>Introduction to Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1066</td>
<td>Introduction to Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1001</td>
<td>Introduction to Economics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 1005</td>
<td>Introduction to Statistics</td>
<td>3</td>
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**LEVEL III**

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CHEM 1067</td>
<td>Introduction to Chemistry II</td>
<td>3</td>
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<tr>
<td></td>
<td>CHEM 1068</td>
<td>Introduction to Chemistry III</td>
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**TOTAL LEVEL I CREDITS**

(30)/24
### (b) LEVEL II

#### SEMESTER 1

<table>
<thead>
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<th>Course Title</th>
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<tr>
<td>CHEM 2160</td>
<td>Main Group Chemistry</td>
<td>4</td>
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<tr>
<td>CHEM 2360</td>
<td>Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2025</td>
<td>Kinetics &amp; Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2012</td>
<td>Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2021</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2023</td>
<td>Financial Management</td>
<td>3</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 2260</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2015</td>
<td>Spectroscopy</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 2003</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2008</td>
<td>Organisational Behaviour</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2032</td>
<td>Managerial Economics</td>
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</tbody>
</table>

### (c) LEVEL III - MANAGEMENT COURSES

#### SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MGMT 3057</td>
<td>Production and Operations</td>
<td>3</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 3060</td>
<td>Operations Planning and Control</td>
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</table>

### (d) LEVEL III - CHEMISTRY COURSES

#### SEMESTER 1 OR 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHEM 3660</td>
<td>research project</td>
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PLUS

(i) Either nine (9) credits of Level III courses from List 1

### LIST 1

#### SEMESTER 1

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3267</td>
<td>Basic Organic Chemistry II</td>
<td>3</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3167</td>
<td>Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3367</td>
<td>Thermodynamics &amp; Statistical Thermodynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

(ii) OR alternatively any six (6) credits from List 1 above AND at least three (3) credits from List 2 (Electives) - see previous page.

### (e) IN ADDITION

Six (6) credits of level II/III Management courses selected from the following:

#### MANAGEMENT ELECTIVES:

#### SEMESTER 1

<table>
<thead>
<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>MKTG 3000</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3017</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2006</td>
<td>Management Information Systems</td>
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</tbody>
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#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MKTG 3007</td>
<td>Marketing Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Students may also select 6 credits of Management courses from any level II/III management courses offered in the Summer.

### (f) NINE (9) CREDITS OF FOUNDATION COURSES:

#### SEMESTER 1 AND 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 1101</td>
<td>Caribbean Civilisation</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 1301</td>
<td>Law, Governance, Economy and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 1102</td>
<td>Academic Writing for Different Disciplines (Option C)</td>
<td>3</td>
</tr>
</tbody>
</table>

### TOTAL DEGREE CREDITS REQUIREMENTS: 96
DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

For further information please visit DCIT website: http://sta.uwi.edu/fst/dcit/

Please note:

i. Students majoring in Computer Science and those registered in the BSc Computer Science and Management, /BSc Information Technology and BSc Computer Science (Special) must seek the approval of the Department to read Computing, Information Technology/Systems courses outside of the FST.

Course Equivalencies: There is substantial overlap in the courses listed hereunder. However, students pursuing Computer Science courses WOULD NOT BE GIVEN credits for the equivalent Information Technology courses and vice versa.

Transfer students who pursued the equivalent Computer Science course would be exempted WITHOUT credits from the relevant Information Technology course as listed hereunder.

<table>
<thead>
<tr>
<th>COMP COURSES</th>
<th>INFO COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1140</td>
<td>INFO 1415</td>
</tr>
<tr>
<td>COMP1100</td>
<td>INFO 1420</td>
</tr>
<tr>
<td>COMP 1200</td>
<td>INFO2420</td>
</tr>
<tr>
<td>COMP 2000</td>
<td>INFO 2410</td>
</tr>
<tr>
<td>COMP 2100</td>
<td>INFO 2405</td>
</tr>
<tr>
<td>COMP 2200</td>
<td>INFO 2425</td>
</tr>
<tr>
<td>COMP 2300</td>
<td>INFO 2430</td>
</tr>
<tr>
<td>COMP 2400</td>
<td>INFO 2400</td>
</tr>
<tr>
<td>COMP 2700</td>
<td>INFO 2415</td>
</tr>
<tr>
<td>COMP 3750</td>
<td>INFO 3430</td>
</tr>
<tr>
<td>COMP 3990</td>
<td>INFO 3490</td>
</tr>
</tbody>
</table>

ii. REGULATION REGARDING FAIL THEORY IN FINAL EXAMINATIONS FOR ALL COMPUTER SCIENCE AND INFORMATION TECHNOLOGY COURSES:

Students must make a minimum of 40% in the final examination to obtain a PASS Grade. Students who have an overall mark of 40% or more but less than 40% in the Final Examination will be deemed to have failed the examination.

iii. INTERNSHIP PROGRAMME FOR UNDERGRADUATE STUDENTS IN COMPUTER SCIENCE/INFORMATION TECHNOLOGY

The Department offers an optional internship programme for second year students majoring in Computer Science or pursuing the BSc Computer Science and Management, BSc Information Technology and BSc Computer Science (Special) degrees. This programme will be helpful in:
- Providing practical training to the students during their degree programme;
- Providing experience in the working environment, and
- Preparing for future jobs.

iv TRANSFER OF COURSEWORK MARKS

The Department does NOT carry forward coursework marks for their courses (COMP or INFO).

COURSE LISTING

List of Courses Offered in the Department of Computing & Information Technology for the 2012/2013 academic year.

KEY:

# Students Majoring in Computer Science or Information Technology will not be credited for COMP 1011.

* INFO courses also offered to students in the Evening University (EU) Programme.

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMP 1011</td>
<td>Introduction to Information Technology #</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1400</td>
<td></td>
<td>Programming I</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1401</td>
<td></td>
<td>Introduction to Computer Science Concepts I</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1402</td>
<td></td>
<td>Computer Science Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1403</td>
<td></td>
<td>Introduction to Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>COMP 2000</td>
<td></td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2200</td>
<td></td>
<td>Computer Architecture</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2700</td>
<td></td>
<td>Database Management Systems I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3100</td>
<td></td>
<td>Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3150</td>
<td></td>
<td>Computer Networks</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3550</td>
<td></td>
<td>Internet Technologies II</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3850</td>
<td></td>
<td>Intelligent Systems</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3990</td>
<td></td>
<td>Project (Game Programming)</td>
<td>4</td>
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<tr>
<td>INFO 1500</td>
<td></td>
<td>Introduction to Information Technology Fundamentals *</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1501</td>
<td></td>
<td>Introduction to WWW Programming *</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1502</td>
<td></td>
<td>Introduction to Problem Solving *</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>INFO 1503</td>
<td>Introduction to Mathematics for Critical Thinking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>INFO 2415</td>
<td>Enterprise Database Systems *</td>
<td>4</td>
<td></td>
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<tr>
<td>INFO 2420</td>
<td>Programming Fundamentals II *</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>INFO 2425</td>
<td>Computer Architecture *</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>INFO 2430</td>
<td>Business Information Systems *</td>
<td>4</td>
<td></td>
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<tr>
<td>INFO 3400</td>
<td>Fundamentals of Operating Systems *</td>
<td>4</td>
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<tr>
<td>INFO 3405</td>
<td>Networking Technologies *</td>
<td>4</td>
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<td>INFO 3415</td>
<td>Information Assurance and Security *</td>
<td>4</td>
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</tr>
<tr>
<td>INFO 3440</td>
<td>Software Engineering</td>
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**SEMESTER 2**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>COMP 1011</td>
<td>Introduction to Information Technology #</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1404</td>
<td>Programming II</td>
<td>3</td>
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<tr>
<td>COMP 1405</td>
<td>Programming III</td>
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<tr>
<td>COMP 1406</td>
<td>Computer Science Mathematics II</td>
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<tr>
<td>COMP 1407</td>
<td>Introduction to Computer Science Concepts II</td>
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<tr>
<td>COMP 2100</td>
<td>Discrete Mathematics for Computer Science</td>
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<tr>
<td>COMP 2300</td>
<td>Programming for Business Applications</td>
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<tr>
<td>COMP 2500</td>
<td>Object-Oriented Programming</td>
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<tr>
<td>COMP 3220</td>
<td>Human Computer Interaction</td>
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<td>COMP 3250</td>
<td>Software Engineering</td>
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<td>COMP 3275</td>
<td>Wireless and Mobile Computing</td>
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<td>COMP 3700</td>
<td>Database Management Systems II</td>
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<td>COMP 3950</td>
<td>Modelling and Simulation</td>
<td>4</td>
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<tr>
<td>INFO 1504</td>
<td>Introduction to Programming Fundamentals I *</td>
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<td>INFO 1505</td>
<td>Introduction to Computer Systems *</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1506</td>
<td>Introduction to Information and Data Management *</td>
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</tr>
<tr>
<td>INFO 1507</td>
<td>Introduction to Business Principles</td>
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<tr>
<td>INFO 2400</td>
<td>Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2405</td>
<td>Discrete Mathematics *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2410</td>
<td>Fundamental Data Structures *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3410</td>
<td>Web Systems and Technologies *</td>
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</tr>
<tr>
<td>INFO 3420</td>
<td>Programming Languages</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3435</td>
<td>E-Commerce *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3490</td>
<td>Project *</td>
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**SEMESTER 3 (EVENING UNIVERSITY PROGRAMME)**

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<th>Course Title</th>
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<td>Introduction to Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1503</td>
<td>Introduction to Mathematics for Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1504</td>
<td>Introduction to Programming Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1507</td>
<td>Introduction to Business Principles</td>
<td>3</td>
</tr>
<tr>
<td>INFO 2405</td>
<td>Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2415</td>
<td>Enterprise Database Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2420</td>
<td>Programming Fundamentals II</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2425</td>
<td>Computer Architecture</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2430</td>
<td>Business Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3410</td>
<td>Web Systems and Technologies</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3425</td>
<td>Professional Ethics and Law</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3440</td>
<td>Software Engineering</td>
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**COURSES NOT OFFERED IN ACADEMIC YEAR 2012/2013**

<table>
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<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>COMP 1100</td>
<td>Computer Programming I</td>
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<tr>
<td>COMP 1200</td>
<td>Computer Programming II</td>
<td>6</td>
</tr>
<tr>
<td>COMP 1300</td>
<td>Mathematics for Computer Science I</td>
<td>6</td>
</tr>
<tr>
<td>COMP 1350</td>
<td>Mathematics for Computer Science II</td>
<td>6</td>
</tr>
<tr>
<td>COMP 2400</td>
<td>Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2600</td>
<td>Theory of Computing I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3300</td>
<td>Programming Languages</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3400</td>
<td>Artificial Intelligence</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3500</td>
<td>Internet Technologies I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3600</td>
<td>Theory of Computing II</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3750</td>
<td>Numerical Computing</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3800</td>
<td>Cryptography and Security</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3900</td>
<td>Special Topics in Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1400</td>
<td>Information Technology</td>
<td>4</td>
</tr>
<tr>
<td>INFO 1405</td>
<td>Programming for the WWW</td>
<td>6</td>
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<tr>
<td>INFO 1410</td>
<td>Information Processing Systems</td>
<td>6</td>
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<tr>
<td>INFO 1415</td>
<td>Mathematics for Critical Thinking</td>
<td>6</td>
</tr>
<tr>
<td>INFO 1420</td>
<td>Programming Fundamentals I</td>
<td>6</td>
</tr>
<tr>
<td>INFO 1425</td>
<td>Introduction to Computer Science</td>
<td>6</td>
</tr>
<tr>
<td>INFO 2500</td>
<td>Networking Technologies</td>
<td>6</td>
</tr>
<tr>
<td>INFO 3430</td>
<td>Scientific Computing</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3500</td>
<td>User Interface Design and Development</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3510</td>
<td>Networking for Professionals</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3520</td>
<td>Database Administration for Professionals</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3530</td>
<td>Geographic Information Systems for Business</td>
<td>4</td>
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</table>
**Major in Computer Science**
(32 ADVANCED CREDITS)

**COURSE LISTING**

**PREREQUISITE COURSES**

**LEVEL I**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1400</td>
<td>Programming I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMP 1401</td>
<td>Introduction to Computer Science Concepts I</td>
<td>3</td>
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</tbody>
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<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 1404</td>
<td>Programming II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMP 1405</td>
<td>Programming III</td>
<td>3</td>
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**CORE COURSES (24 credits):**

**LEVELS II/III**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 2000</td>
<td>Data Structures</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 2200</td>
<td>Computer Architecture</td>
<td>4</td>
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</tr>
<tr>
<td>COMP 3100</td>
<td>Operating Systems</td>
<td>4</td>
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<thead>
<tr>
<th>SEMESTER 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMP 2100</td>
<td>Discrete Mathematics for Computer Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 2500</td>
<td>Object-Oriented Programming</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3000</td>
<td>Design and Analysis of Algorithms</td>
<td>4</td>
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</tbody>
</table>

**ELECTIVES** (any 8 credits must be selected from the following Computer Science courses):

**LEVELS II/III**

<table>
<thead>
<tr>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 2700</td>
<td>Database Management Systems I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3150</td>
<td>Computer Networks</td>
<td>4</td>
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</tr>
<tr>
<td>COMP 3550</td>
<td>Internet Technologies II</td>
<td>4</td>
<td></td>
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<tr>
<td>COMP 3850</td>
<td>Intelligent Systems</td>
<td>4</td>
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<tr>
<td>COMP 3990</td>
<td>Project (Game Programming)</td>
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<table>
<thead>
<tr>
<th>SEMESTER 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 2300</td>
<td>Programming for Business Applications</td>
<td>4</td>
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<tr>
<td>COMP 3220</td>
<td>Human Computer Interaction</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3250</td>
<td>Software Engineering</td>
<td>4</td>
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</tr>
<tr>
<td>COMP 3275</td>
<td>Wireless and Mobile Computing</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3550</td>
<td>Internet Technologies II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3700</td>
<td>Database Management Systems II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3950</td>
<td>Modelling and Simulation</td>
<td>4</td>
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</table>

**Minor in Computer Science**
(16 CREDITS)

**PREREQUISITE COURSES**

**LEVEL I**

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<th>Credits</th>
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<tr>
<td>COMP 1400</td>
<td>Programming I</td>
<td>3</td>
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</tr>
<tr>
<td>COMP 1401</td>
<td>Introduction to Computer Science Concepts I</td>
<td>3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>SEMESTER 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 1404</td>
<td>Programming II</td>
<td>3</td>
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<tr>
<td>COMP 1405</td>
<td>Programming III</td>
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**CORE COURSES: (8 CREDITS)**

**LEVEL II**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 2000</td>
<td>Data Structures</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>SEMESTER 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMP 2500</td>
<td>Object-Oriented Programming</td>
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**LEVELS II/III COURSES (8 CREDITS)**

Any 8 credits from the following:

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 2200</td>
<td>Computer Architecture</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 2700</td>
<td>Database Management Systems I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3100</td>
<td>Operating Systems</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3150</td>
<td>Computer Networks</td>
<td>4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 3000</td>
<td>Design and Analysis of Algorithms</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>COMP 3250</td>
<td>Software Engineering</td>
<td>4</td>
<td></td>
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</tbody>
</table>
BSc Information Technology
(ALSO OFFERED UNDER THE EVENING UNIVERSITY PROGRAMME)
(93 CREDITS)

THIS PROGRAMME WAS REVISED AND WILL BE IN EFFECT FROM THE ACADEMIC YEAR 2012/2013.

N.B. STUDENTS SHOULD NOTE THE COURSE EQUIVALENCIES LISTED AT THE BEGINNING OF THE DEPARTMENTAL INFORMATION.

KEY:
* INFO courses also offered to students in the Evening University (EU) Programme

COURSE LISTING

LEVEL I (24 CREDITS)

SEMIESTER 1

CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>INFO 1500</td>
<td>Introduction to Information Technology Fundamentals *</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1502</td>
<td>Introduction to Problem Solving *</td>
<td>3</td>
</tr>
<tr>
<td>INFO 1503</td>
<td>Introduction to Mathematics for Critical Thinking</td>
<td>3</td>
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</table>

LEVEL II/III (60 CREDITS) comprising of:

CORE courses (48 credits) and ELECTIVE courses (12 credits).

SEMIESTER 1

CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 2415</td>
<td>Enterprise Database Systems *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2420</td>
<td>Programming Fundamentals II *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2425</td>
<td>Computer Architecture *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2430</td>
<td>Business Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3400</td>
<td>Fundamentals of Operating Systems *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3405</td>
<td>Networking Technologies *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3415</td>
<td>Information Assurance and Security *</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3440</td>
<td>Software Engineering</td>
<td>4</td>
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</table>

ELECTIVE COURSE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>INFO 2430</td>
<td>Business Information Systems</td>
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LEVEL II/III

SEMIESTER 2

CORE COURSES

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>INFO 2400</td>
<td>Information Systems Development</td>
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<tr>
<td>INFO 2405</td>
<td>Discrete Mathematics</td>
<td>4</td>
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<tr>
<td>INFO 2415</td>
<td>Enterprise Database Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2420</td>
<td>Programming Fundamentals II</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2425</td>
<td>Computer Architecture</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3410</td>
<td>Web Systems and Technologies</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3440</td>
<td>Software Engineering</td>
<td>4</td>
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ELECTIVE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INFO 3420</td>
<td>Programming Languages</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3435</td>
<td>E-Commerce</td>
<td>4</td>
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SEMIESTER 3 (EVENING UNIVERSITY PROGRAMME)

CORE COURSES

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INFO 2405</td>
<td>Discrete Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2415</td>
<td>Enterprise Database Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2420</td>
<td>Programming Fundamentals II</td>
<td>4</td>
</tr>
<tr>
<td>INFO 2425</td>
<td>Computer Architecture</td>
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<td>INFO 3410</td>
<td>Web Systems and Technologies</td>
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<td>INFO 3440</td>
<td>Software Engineering</td>
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ELECTIVE COURSES

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INFO 2430</td>
<td>Business Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>INFO 3425</td>
<td>Professional Ethics and Law</td>
<td>4</td>
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</tbody>
</table>
FOUNDATION COURSES (9 CREDITS)

SEMESTERS 1 & 2
Course Code Course Title Credits
FOUN 1101 Caribbean Civilization 3
FOUN 1301 Law, Governance, Economy and Society 3

SEMESTER 2
Course Code Course Title Credits
FOUN 1102 Academic Writing for Different Disciplines (Option C) 3

BSc Computer Science
(Special)
(93 CREDITS)

The Level I courses in this programme were revised and will be in effect from the Academic Year 2012/2013.

N.B. STUDENTS SHOULD NOTE THE COURSE EQUIVALENCIES LISTED AT THE BEGINNING OF THE DEPARTMENTAL INFORMATION.

CORE COURSES

LEVEL I (24 CREDITS)

CORE COURSES

SEMESTER 1
Course Code Course Title Credits
COMP 1400 Programming I 3
COMP 1401 Introduction to Computer Science Concepts I 3
COMP1402 Computer Science Mathematics I 3
COMP1403 Introduction to Web Programming 3

SEMESTER 2
Course Code Course Title Credits
COMP 1404 Programming II 3
COMP 1405 Programming III 3
COMP 1406 Computer Science Mathematics II 3
COMP 1407 Introduction to Computer Science Concepts II 3

LEVEL II/III (60 CREDITS) comprising of:
CORE courses (52 credits) and ELECTIVE courses (8 credits) from any other Level II/III courses,

Mandatory ELECTIVE COURSES
(8 CREDITS from any other Level II/III courses)

LEVEL II (36 CREDITS)

CORE co urses (52 credits) and ELECTIVE courses (8 credits) from any other Level II/III courses,
## FOUNDATION COURSES (9 CREDITS)

### SEMESTERS 1 & 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FOUN 1101</td>
<td>Caribbean Civilization</td>
<td>3</td>
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<tr>
<td>FOUN 1301</td>
<td>Law, Governance, Economy and Society</td>
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### SEMESTER 2

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FOUN 1102</td>
<td>Academic Writing for Different Disciplines (Option C)</td>
<td>3</td>
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</table>

## BSc Computer Science and Management

(99 CREDITS)

Please note:

1. Acceptance for the BSc Computer Science and Management does not guarantee acceptance for courses in the Faculty of Social Sciences other than those specified below.

2. Students are advised that, in choosing courses from the Faculty of Social Sciences, the regulations from that Faculty will apply. In particular, credit will not be given for two courses which the Faculty of Social Sciences designates as having substantial overlap. Eg. ECON 2001 and MGMT 2032.

## COURSE LISTING

### CORE COURSES:

#### LEVEL 1 (30 CREDITS)

#### SEMESTER 1

<table>
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<tbody>
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<td>ACCT 1002</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1400</td>
<td>Programming I</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1401</td>
<td>Introduction to Computer Science Concepts I</td>
<td>3</td>
</tr>
<tr>
<td>COMP1402</td>
<td>Computer Science Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1001</td>
<td>Introduction to Economics I</td>
<td>3</td>
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</table>

#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ACCT 1003</td>
<td>Introduction to Cost &amp; Managerial Accounting</td>
<td>3</td>
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<tr>
<td>COMP 1404</td>
<td>Programming II</td>
<td>3</td>
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<tr>
<td>COMP 1405</td>
<td>Programming III</td>
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<tr>
<td>COMP 1406</td>
<td>Computer Science Mathematics II</td>
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<td>ECON 1002</td>
<td>Introduction to Economics II</td>
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### SEMESTER II/III (60 CREDITS)

#### COMPUTER SCIENCE CORE COURSES (32 CREDITS)

#### SEMESTER 1

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMP 2000</td>
<td>Data Structures</td>
<td>4</td>
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<tr>
<td>COMP 2200</td>
<td>Computer Architecture</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2700</td>
<td>Database Management Systems I</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3100</td>
<td>Operating Systems</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COMP 2100</td>
<td>Discrete Mathematics for Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2300</td>
<td>Programming for Business Applications</td>
<td>4</td>
</tr>
<tr>
<td>COMP 2500</td>
<td>Object-Oriented Programming</td>
<td>4</td>
</tr>
<tr>
<td>COMP 3000</td>
<td>Design and Analysis of Algorithms</td>
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### MANAGEMENT COURSES CORE COURSES

(15 CREDITS)

#### SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MGMT 2021</td>
<td>Business Law</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MGMT 2003</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2008</td>
<td>Organisational Behaviour</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2032</td>
<td>Managerial Economics</td>
<td>3</td>
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</table>

AND any 3 credits of electives from the following

#### SEMESTER 1

<table>
<thead>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 2017</td>
<td>Management Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2012</td>
<td>Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3000</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 2023</td>
<td>Financial Management</td>
<td>3</td>
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</table>

### ELECTIVE COURSES (13 CREDITS)

A minimum of thirteen (13) credits chosen from Levels II/III Computer Science, Mathematics, Economics or Management courses.

### FOUNDATION COURSES (9 CREDITS)

#### SEMESTERS 1 & 2

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<tr>
<td>FOUN 1301</td>
<td>Law, Governance, Economy and Society</td>
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#### SEMESTER 2

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<td>Academic Writing for Different Disciplines (Option C)</td>
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DEPARTMENT OF LIFE SCIENCES

COURSE LISTING

List of Courses Offered in the Department of Life Sciences for the 2012/2013 academic year.

NOTE

Students entering in 2012/2013 must meet a minimum 93-credit requirement to graduate; those entering before must meet the previous 101-credit requirement.

KEY

* Offered in alternate years
** Taught by Open Campus (School of Continuing Studies); not counted towards a student’s credit requirements for the award of the BSc Degree
*** Students must consult with course coordinator prior to registering for BIOL3068 or BIOL3069

SEMESTER 1

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SEMESTER 3 (SUMMER)

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(Will not be offered in 2012/13)
MAJORS
The following majors are offered by the department:
• Biochemistry
• Biology
• Environmental & Natural Resource Management

Students pursuing a major may also elect to do any of the minors listed below. Note that common courses can only be counted once. **Students doing the major in ENRM are not permitted to do a minor in Environmental Biology.**

MINORS
• Biochemistry
• Biology
• Biotechnology
• Botany
• Environmental Biology
• Environmental & Natural Resource Management
• Marine Biology
• Zoology

Prior to 2011/12, students majoring in Biology and Biochemistry should credit BIOL 2361 (Biomolecules and Energy Metabolism) to the major in Biochemistry and BIOL 3061 (Molecular Biology) to the major in Biology. Such students should therefore choose an ADDITIONAL ELECTIVE from EACH major to replace BIOL 2361 or BIOL 3061.

With effect from 2011/12, students majoring in Biology and Biochemistry should credit BIOL 3061 - Molecular Biology to the major in Biology. Such students should NOT read BIOL 2365 - Comparative Biochemistry, but should choose an elective from the given Biology electives to replace BIOL2365. Students should also chose an elective from the given Biochemistry electives to replace BIOL3061.

Students wishing to read BIOL2063 – Marine Ecology or BIOL2462 - Caribbean Island Ecology must have at least a grade B in BIOL1462.

BIOL 1061 - Cell Biology and Genetics will not be credited with AGRI 1011 - Introduction to General Genetics and AGRI 1013 - Introduction to Biochemistry or BIOL 1362 - Biochemistry I or BIOL1364 - Genetics I

BIOL 1261 - Diversity of Organisms will not be credited with AGRI 1012 - Microbiology or BIOL 1065 - Diversity of Plants and Animals;

BIOL1362 - Biochemistry I will not be credited with AGRI 1013 - Introduction to Biochemistry;

BIOL1364 - Introductory Genetics will not be credited with AGRI 1011 - Introduction to General Genetics;

BIOL 2263 - General Microbiology will not be credited with BIOL 2261 - Biology of Microorganisms

BIOL 3264 - Functional Design in Biology will not be credited with BIOL 2861 - Function Design in Animals.

BIOL 2365 - Comparative Biochemistry will not be credited with BIOL 2361 - Biomolecules and Energy Metabolism

NOTE: Students will be debarred from writing the final examination if they have not attended, completed and handed in laboratory reports for at least 75% of laboratory or field exercises.
Major in Biochemistry

**COURSE LISTING (PRIOR TO 2012/13)**

**PREREQUISITE COURSES**

**LEVEL I**

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**SEMESTER 2**

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**COURSE LISTING (WITH EFFECT FROM 2012/13)**

**PREREQUISITE COURSES**

**LEVEL I**

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**CORE COURSES (28 CREDITS)**

**LEVEL II/III**

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**MAJOR ELECTIVES (4 CREDITS)**

Any 4 credits from the following:

**LEVEL II/III**

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<td>BIOL 3262</td>
<td>Microbial Biotechnology</td>
<td>4</td>
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<td>Clinical Biochemistry</td>
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<tr>
<td>CHEM 2460</td>
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### COURSE LISTING (WITH EFFECT FROM 2012/13)

#### PREREQUISITE COURSES

**LEVEL I**

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**(For students without a pass in CAPE/GCE A’ Level Chemistry or equivalent)**

**LEVEL I**

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**(For students without a pass in CAPE/GCE A’ Level Mathematics or equivalent)**

#### CORE COURSES (32 CREDITS)

**LEVEL II/III**

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See note below (under Environmental and Natural Resources Management) for students taking joint majors in Biology and ENRM

**LEVEL II/III**

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**SEMESTER 3 (SUMMER)**

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#### ELECTIVES FOR BIOLOGY DOUBLE MAJOR

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<td>Caribbean Island Ecology</td>
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<td>BIOL 3069</td>
<td>Research Project</td>
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Major in Environmental & Natural Resource Management

This interdisciplinary programme is offered in conjunction with the Departments of Life Sciences, Chemistry, Food Production and Agricultural Economics & Extension

i) See note b below for students reading joint majors in Biology and Environmental and Natural Resource Management (ENRM).

ii) Students doing the major in ENRM are not permitted to do the minor in Environmental Biology.

COURSE LISTING

PREREQUISITE COURSES

LEVEL I

SEMESTER 1

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<td>Soils and the Environment</td>
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<td>BIOL 1065</td>
<td>Diversity of Plants and Animals</td>
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LEVEL I

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CORE COURSES (24 CREDITS)

LEVEL II/III

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LEVEL II/III

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<tbody>
<tr>
<td>AGSL 3002</td>
<td>Soil Survey &amp; Land Evaluation</td>
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<tr>
<td>BIOL 3062</td>
<td>Conservation Biology</td>
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</tr>
<tr>
<td>BIOL 3464</td>
<td>Tropical Forest Ecology &amp; Management</td>
<td>4</td>
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</tbody>
</table>

MAJOR ELECTIVES (8 CREDITS)

Any 8 credits from the following:

LEVEL II/III

SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBU 3010</td>
<td>Environmental Economics</td>
<td>4</td>
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<tr>
<td>AGEX 2001</td>
<td>Operations and Management of Extension Programmes</td>
<td>4</td>
</tr>
<tr>
<td>AGSL 3010</td>
<td>Geophysical and Environmental Soil Sensing</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2063</td>
<td>Marine Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 2462</td>
<td>Caribbean Island Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3069</td>
<td>Research Project</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3766</td>
<td>Plant Ecophysiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3560</td>
<td>Environmental Chemistry</td>
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</table>

LEVEL II/III

SEMESTER 2

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<td>Freshwater Biology</td>
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<tr>
<td>BIOL 2063</td>
<td>Marine Ecology</td>
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</tr>
<tr>
<td>BIOL 3069</td>
<td>Research Project</td>
<td>4</td>
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<tr>
<td>BIOL 3461</td>
<td>Coastal Ecosystem Management</td>
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<tr>
<td>BIOL 3864</td>
<td>Fisheries Biology &amp; Management</td>
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LEVEL II/III

SEMESTER 3 (SUMMER)

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<tbody>
<tr>
<td>BIOL 3068</td>
<td>Field Course in Neotropical Ecology</td>
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Students wishing to do JOINT MAJORS in Environmental & Natural Resource Management and Biology should register for the following Level I courses:

LEVEL I

SEMESTER 1

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<tbody>
<tr>
<td>AGBU1005</td>
<td>Introduction to Microeconomics</td>
<td>3</td>
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<tr>
<td>AGSL1000</td>
<td>Soils and the Environment</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1262</td>
<td>Living Organisms I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1263</td>
<td>Living Organisms II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1062**</td>
<td>Basic Chemistry for Life Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

**For students without a pass in CAPE/GCE A’ Level Chemistry or equivalent)
SEMINAR 2
Course Code  Course Title                  Credits
AGBU1002  Introduction to Agro-Environmental Management  4
BIOL 1362  Biochemistry I                  3
BIOL 1364  Genetics I                     3
BIOL 1462  General Ecology and Biometry    6
MATH1125  Fundamental Mathematics          3
for the General Sciences II **
**(For students without a pass in CAPE/GCE A’ Level Mathematics or equivalent)

MINORS

NOTE: Research projects BIOL 3069 done under a relevant area, will be considered towards the following minors in that discipline. Please consult the Head of Department before registering for this course.

(i) Core courses must be credited towards the chosen major and cannot be credited towards the minor.

(ii) Students reading the major in Biology with the minor in Biochemistry should read BIOL 2361 and choose a Biology elective to replace BIOL2365*

Minor in Biochemistry
(16 CREDITS)

COURSE LISTING

CORE COURSES (8 CREDITS)

LEVEL II/III

SEMIESTER 1

Course Code  Course Title                  Credits
BIOL 2361  Biomolecules & Energy Metabolism  4
BIOL 2363  Metabolism                        4

MINOR ELECTIVES

Any 8 credits from the following courses:

LEVEL II/III

SEMIESTER 1

Course Code  Course Title                  Credits
BIOL 3061  Molecular Biology                4
BIOL 3069  Research Project                 4
BIOL 3361  Applied Biochemistry             4

LEVEL II/III

SEMIESTER 2

Course Code  Course Title                  Credits
BIOL 2362  Further Metabolism and Gene Expression  4
BIOL 2364  Advanced General Biochemistry     4
BIOL 3069  Research Project                 4
BIOL 3362  Selected Topics in Biochemistry   4
BIOL 3364  Clinical Biochemistry             4

Minor in Biology
(16 CREDITS)

COURSE LISTING

LEVEL I (PREREQUISITES)

SEMIESTER 2

Course Code  Course Title                  Credits
BIOL 1362  Biochemistry I                  3
BIOL 1364  Genetics I                      3

AND 16 credits of Level II/III courses as follows:

CORE COURSES (8 CREDITS)

SEMIESTER 2

Course Code  Course Title                  Credits
BIOL 2862  Animal Physiology               4
BIOL 2761  Plant Physiology                4

ELECTIVES: Any other 8 credits of electives from the following courses:

LEVEL III

SEMIESTER 2

Course Code  Course Title                  Credits
BIOL3264  Functional Design in Biology     4
BIOL 3662  Evolution and Biosystematics     4
BIOL 3069  Research Project                4

SEMIESTER 3 (SUMMER)

Course Code  Course Title                  Credits
BIOL 3068  Field Course in Neotropical Ecology  4
### Minor in Biotechnology
**(15/16 CREDITS)**
Any 15/16 credits from the following courses

**COURSE LISTING**

<table>
<thead>
<tr>
<th>LEVEL II/III</th>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>BIOC 3061</td>
<td>Molecular Biology</td>
<td></td>
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<tr>
<td></td>
<td>BIOC 3763</td>
<td>Crop Improvement</td>
<td></td>
<td>4</td>
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<tr>
<td></td>
<td>BIOC 3069</td>
<td>Research Project</td>
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### Minor in Environmental Biology
**(16 CREDITS)**
Any 16 credits from the following courses

**COURSE LISTING**

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<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>BIOC 2063</td>
<td>Marine Ecology</td>
<td></td>
<td>4</td>
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<tr>
<td></td>
<td>BIOC 2461</td>
<td>Humans and the Environment</td>
<td></td>
<td>4</td>
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<tr>
<td></td>
<td>BIOC 2462</td>
<td>Caribbean Island Ecology</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOC 3069</td>
<td>Research Project</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOC 3766</td>
<td>Plant Ecophysiology</td>
<td></td>
<td>4</td>
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</table>

### Minor in Botany
**(16 CREDITS)**
Any 16 credits from the following courses

**COURSE LISTING**

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<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>BIOC 2462</td>
<td>Caribbean Island Ecology</td>
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<td>BIOC 3766</td>
<td>Plant Ecophysiology</td>
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<td></td>
<td>BIOC 3767</td>
<td>Biology of Plant Pathogens</td>
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<td></td>
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<td>Research Project</td>
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### Minor in Environmental & Natural Resource Management
**(16 CREDITS)**
Any 16 credits from the following courses

**COURSE LISTING**

<table>
<thead>
<tr>
<th>LEVEL II/III</th>
<th>SEMESTER 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>BIOC 2062</td>
<td>Freshwater Biology</td>
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<td></td>
<td>BIOC 3062</td>
<td>Conservation Biology</td>
<td></td>
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<tr>
<td></td>
<td>BIOC 3464</td>
<td>Tropical Forest Ecology and Management</td>
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<td>4</td>
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<td></td>
<td>BIOC 3069</td>
<td>Research Project</td>
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### Minor in Environmental & Natural Resource Management
**(16 CREDITS)**
Any 16 credits from the following courses

**COURSE LISTING**

<table>
<thead>
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<th>SEMESTER 1</th>
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<td>Humans &amp; the Environment</td>
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<tr>
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<td>BIOC 2462</td>
<td>Caribbean Island Ecology</td>
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<td></td>
<td>BIOC 3463</td>
<td>Pollution and Environmental Management</td>
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<td>Geophysical and Environmental Soil Sensing</td>
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<td>BIOC 3069</td>
<td>Research Project</td>
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<td>4</td>
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<tr>
<td></td>
<td>BIOC 3766</td>
<td>Plant Ecophysiology</td>
<td></td>
<td>4</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>AGSL 3002</td>
<td>Soil Survey &amp; Land Evaluation</td>
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<td>BIOL 3062</td>
<td>Conservation Biology</td>
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<td></td>
<td></td>
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<tr>
<td>BIOL 3464</td>
<td>Tropical Forest Ecology &amp; Management</td>
<td>4</td>
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<tr>
<td>BIOL 3069</td>
<td>Research Project</td>
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**LEVEL II/III SEMESTER 3 (SUMMER)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 3068</td>
<td>Field Course in Neotropical Ecology</td>
<td>4</td>
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</table>

**Minor in Marine Biology**

(16 CREDITS)

Any 16 credits from the following courses

**COURSE LISTING**

**LEVEL II/III SEMESTER 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 2063</td>
<td>Marine Ecology</td>
<td>4</td>
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<td>BIOL 3863</td>
<td>Tropical Aquaculture</td>
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<td>BIOL 3069</td>
<td>Research Project</td>
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**LEVEL II/III SEMESTER 2**

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<tr>
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<tbody>
<tr>
<td>BIOL 3461</td>
<td>Coastal Ecosystem Management</td>
<td>4</td>
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<td>BIOL 3864</td>
<td>Fisheries Biology &amp; Management</td>
<td>4</td>
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<tr>
<td>BIOL 3069</td>
<td>Research Project</td>
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**LEVEL II/III SEMESTER 3 (SUMMER)**

<table>
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<tbody>
<tr>
<td>BIOL 2068</td>
<td>Field Course in Neotropical Ecology</td>
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</table>

*offered in alternate years.
**DEPARTMENT OF MATHEMATICS & STATISTICS**

Please note:

Students reading courses in Mathematics in the Faculty of Science and Technology are advised to clear with the Head, Department of Mathematics & Statistics, before registering for any course in the Faculty of Social Sciences that involves Mathematics or Statistics.

**COURSE LISTING**

List of courses offered in the Department of Mathematics & Statistics for the 2012/2013 academic year.

**KEY:**

### Students pursuing MATH 2140 or MATH 2150 will not be credited for MATH 2190.

**Taught by Open Campus; not counted towards a student’s credit requirements for the award of the BSc Degree.**

**LIST OF COURSES OFFERED IN THE DEPARTMENT OF MATHEMATICS & STATISTICS FOR THE 2012/2013 ACADEMIC YEAR**

**SEMESTER 1**

<table>
<thead>
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<tr>
<td>MATH 1115</td>
<td>Fundamental Mathematics for the General Sciences I</td>
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<tr>
<td>MATH1125</td>
<td>Fundamental Mathematics for the General Sciences II</td>
<td>3</td>
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<tr>
<td>MATH 1142</td>
<td>Calculus I</td>
<td>3</td>
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<tr>
<td>MATH 1152</td>
<td>Sets and Number Systems</td>
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<tr>
<td>MATH 1160</td>
<td>Introductory Applied Mathematics I</td>
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<tr>
<td>MATH 2100</td>
<td>Abstract Algebra</td>
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<tr>
<td>MATH 2140</td>
<td>Introduction to Probability**</td>
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<tr>
<td>MATH 2170</td>
<td>Introduction to Combinatorics</td>
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<td>MATH 2190</td>
<td>Probability and Statistics I</td>
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<td>MATH 2210</td>
<td>Mathematics of Finance</td>
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<td>MATH 3250</td>
<td>Fluid Dynamics I</td>
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<td>MATH 3310</td>
<td>Life Contingencies</td>
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<td>MATH 3351</td>
<td>Regression and Time Series Analysis</td>
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<td>MATH 3400</td>
<td>Graph Theory</td>
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<td>MATH 3430</td>
<td>Advanced Algebra I - Theory</td>
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<td>MATH 3450</td>
<td>Statistical Theory I</td>
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<tr>
<td>MATH 3500</td>
<td>Complex Analysis</td>
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**SEMESTER 2**

<table>
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<td>MATH 1115</td>
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<td>MATH1125</td>
<td>Fundamental Mathematics for the General Sciences II</td>
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<tr>
<td>MATH 1141</td>
<td>Introductory Linear Algebra &amp; Analytical Geometry</td>
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<tr>
<td>MATH 1151</td>
<td>Calculus II</td>
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<td>MATH 1170</td>
<td>Introductory Applied Mathematics II</td>
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<td>MATH 1191</td>
<td>Introduction to Mathematical Software I</td>
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<td>MATH 2110</td>
<td>Linear Algebra</td>
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<td>MATH 2160</td>
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<td>MATH 2180</td>
<td>Introduction to Optimization**</td>
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<td>MATH 2220</td>
<td>Introduction to Actuarial Mathematics</td>
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<td>MATH 3240</td>
<td>Real Analysis</td>
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<td>Risk Theory</td>
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<td>MATH 3321</td>
<td>Principles of Asset/Liability</td>
<td>4</td>
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<td>MATH 3354</td>
<td>Management Actuarial Science</td>
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<td>MATH 3354</td>
<td>Actuarial Project</td>
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<td>MATH 3440</td>
<td>Advanced Algebra II-Applications</td>
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<td>MATH 3460</td>
<td>Statistical Theory II</td>
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<tr>
<td>MATH 3470</td>
<td>Sampling Theory</td>
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**COURSES NOT OFFERED IN ACADEMIC YEAR 2012/2013**

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<td>MATH 3110</td>
<td>Mathematical Statistics - Probability Theory</td>
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<tr>
<td>MATH 3120</td>
<td>Mathematical Statistics - Statistical Inference</td>
<td>4</td>
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<td>MATH 3260</td>
<td>Fluid Dynamics II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3410</td>
<td>Combinatorics and Computing</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3420</td>
<td>Special Topics in Graph Theory</td>
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</tr>
</tbody>
</table>
Major in Mathematics
(32 CREDITS)

COURSE LISTING

PREREQUISITE COURSES
LEVEL I

SEMESTER 1
Course Code  Course Title  Credits
MATH 1142  Calculus I  3
MATH 1152  Sets and Number Systems  3

SEMESTER 2
Course Code  Course Title  Credits
MATH 1141  Introductory Linear Algebra & Analytical Geometry  3
MATH 1151  Calculus II  3

CORE COURSES (16 credits):
LEVEL II

SEMESTER 1
Course Code  Course Title  Credits
MATH 2100  Abstract Algebra  4
MATH 2120  Analysis & Mathematical Methods I  4

SEMESTER 2
Course Code  Course Title  Credits
MATH 2110  Linear Algebra  4
MATH 2160  Analysis & Mathematical Methods II  4

ELECTIVES (16 credits)
(At least 8 credits must be selected from Level III Mathematics courses)

LEVELS II/III

SEMESTER 1
Course Code  Course Title  Credits
MATH 2140  Introduction to Probability  4
MATH 2170  Introduction to Combinatorics  4
MATH 2190  Probability and Statistics I  4
MATH 2110  Mathematics of Finance  4
MATH 3250  Fluid Dynamics I  4
MATH 3310  Life Contingencies  4
MATH 3351  Regression and Time Series Analysis  4
MATH 3400  Graph Theory  4
MATH 3430  Advanced Algebra I - Theory  4
MATH 3450  Statistical Theory I  4
MATH 3500  Complex Analysis  4

The following electives for the major in Mathematics will not be offered in the academic year 2012/2013

Course Code  Course Title  Credits
MATH 2200  Introduction to Statistics  4
MATH 3110  Mathematical Statistics-Probability Theory  4
MATH 3120  Mathematical Statistics - Statistical Inference  4
MATH 3240  Fluid Dynamics II  4
MATH 3410  Combinatorics and Computing  4
MATH 3420  Special Topics in Graph Theory  4
MATH 3440  Advanced Algebra II - Applications  4
MATH 3460  Statistical Theory II  4
MATH 3470  Sampling Theory  4

Double Major in Mathematics  
(64 CREDITS)

**COURSE LISTING**

**PREREQUISITE COURSES**

**LEVEL I**

**SEMESTER 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 1142</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1152</td>
<td>Sets and Number Systems</td>
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**SEMESTER 2**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>MATH 1141</td>
<td>Introductory Linear Algebra &amp; Analytical Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1151</td>
<td>Calculus II</td>
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**CORE COURSES (16 credits):**

**LEVEL II**

**SEMESTER 1**

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<tbody>
<tr>
<td>MATH 2100</td>
<td>Abstract Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2120</td>
<td>Analysis &amp; Mathematical Methods I</td>
<td>4</td>
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**SEMESTER 2**

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<tr>
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<tr>
<td>MATH 2110</td>
<td>Linear Algebra</td>
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<tr>
<td>MATH 2160</td>
<td>Analysis &amp; Mathematical Methods II</td>
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**ELECTIVES (48 CREDITS)**

(At least 32 credits must be selected from Level III Mathematics courses)

**LEVELS II/III**

**SEMESTER 1**

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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>MATH 2170</td>
<td>Introduction to Combinatorics</td>
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<tr>
<td>MATH 2190</td>
<td>Probability and Statistics I</td>
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<tr>
<td>MATH 2210</td>
<td>Mathematics of Finance</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3250</td>
<td>Fluid Dynamics I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3310</td>
<td>Life Contingencies</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3351</td>
<td>Regression and Time Series</td>
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</tr>
<tr>
<td></td>
<td>Analysis</td>
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<tr>
<td>MATH 3400</td>
<td>Graph Theory</td>
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<tr>
<td>MATH 3430</td>
<td>Advanced Algebra I - Theory</td>
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<td>MATH 3450</td>
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**SEMESTER 2**

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<td>Introduction to Optimization</td>
<td>4</td>
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<tr>
<td>MATH 2220</td>
<td>Introduction to Actuarial Mathematics</td>
<td>4</td>
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<tr>
<td>MATH 3240</td>
<td>Real Analysis</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3280</td>
<td>Introduction to Mathematical Modelling I</td>
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</tr>
<tr>
<td>MATH 3290</td>
<td>Combinatorics</td>
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<td>MATH 3320</td>
<td>Risk Theory</td>
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<tr>
<td>MATH 3321</td>
<td>Principles of Asset/Liability Management Actuarial Science</td>
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<tr>
<td>MATH 3440</td>
<td>Advanced Algebra II - Applications</td>
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<td>MATH 3460</td>
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<td>MATH 3470</td>
<td>Sampling Theory</td>
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The following electives for the double major in Mathematics will not be offered in academic year 2012/2013

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MATH 2200</td>
<td>Probability and Statistics II</td>
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<tr>
<td>MATH 3110</td>
<td>Mathematical Statistics - Probability Theory</td>
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</tr>
<tr>
<td>MATH 3120</td>
<td>Mathematical Statistics - Statistical Inference</td>
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<tr>
<td>MATH 3260</td>
<td>Fluid Dynamics II</td>
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</tr>
<tr>
<td>MATH 3410</td>
<td>Combinatorics and Computing</td>
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<tr>
<td>MATH 3420</td>
<td>Special Topics in Graph Theory</td>
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</table>
### Minor in Mathematics

**COURSE LISTING**

**CORE COURSES (8 credits):**

#### LEVEL II

<table>
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<tr>
<th>Semester 1</th>
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<th>Course Title</th>
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<tbody>
<tr>
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<td>MATH 2100</td>
<td>Abstract Algebra</td>
<td>4</td>
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<tr>
<td>OR</td>
<td>MATH 2120</td>
<td>Analysis &amp; Mathematical Methods I</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EITHER</td>
<td>MATH 2110</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>MATH 2160</td>
<td>Analysis &amp; Mathematical Methods II</td>
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**ELECTIVES:**

Any 8 credits from the following:

#### LEVELS II/III

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 2140</td>
<td>Introduction to Probability</td>
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<td>MATH 2170</td>
<td>Introduction to Combinatorics</td>
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<td>MATH 2190</td>
<td>Probability and Statistics I</td>
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<tr>
<td>MATH 2210</td>
<td>Mathematics of Finance</td>
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<td>MATH 3250</td>
<td>Fluid Dynamics I</td>
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<tr>
<td>MATH 3310</td>
<td>Life Contingencies</td>
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<td>MATH 3351</td>
<td>Regression and Time Series</td>
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<tr>
<td>MATH 3400</td>
<td>Graph Theory</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 3430</td>
<td>Advanced Algebra I - Theory</td>
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<tr>
<td>MATH 3450</td>
<td>Statistical Theory I</td>
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<tr>
<td>MATH 3500</td>
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#### LEVEL II/III

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
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<td>MATH 2150</td>
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<td>MATH 3240</td>
<td>Real Analysis</td>
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<td>MATH 3290</td>
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<td>Risk Theory</td>
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<td>MATH 3321</td>
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<tr>
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<td>Advanced Algebra II - Applications</td>
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<td>MATH 3460</td>
<td>Statistical Theory II</td>
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<tr>
<td>MATH 3470</td>
<td>Sampling Theory</td>
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The following electives for the minor in Mathematics **WILL NOT BE OFFERED** in the academic year 2012/2013:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 2200</td>
<td>Probability and Statistics II</td>
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<tr>
<td>MATH 3110</td>
<td>Mathematical Statistics - Probability Theory</td>
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<tr>
<td>MATH 3120</td>
<td>Mathematical Statistics - Statistical Inference</td>
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<tr>
<td>MATH 3260</td>
<td>Fluid Dynamics II</td>
<td>4</td>
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<tr>
<td>MATH 3410</td>
<td>Combinatorics and Computing</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3420</td>
<td>Special Topics in Graph Theory</td>
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### Minor in Statistics

**COURSE LISTING**

#### LEVELS II/III

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 3450</td>
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<th>Credits</th>
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<tbody>
<tr>
<td>MATH 2150</td>
<td>Introduction to Statistics</td>
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<tr>
<td>MATH 3460</td>
<td>Statistical Theory II</td>
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# BSc Actuarial Science

(104 CREDITS)

## COURSE LISTING

### LEVEL I (30 CREDITS)

#### SEMESTER 1

<table>
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<tbody>
<tr>
<td>ACCT 1002</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
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<tr>
<td>ECON 1001</td>
<td>Introduction to Economics I</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1400</td>
<td>Programming I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1142</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1152</td>
<td>Sets and Number Systems</td>
<td>3</td>
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#### SEMESTER 2

<table>
<thead>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 1003</td>
<td>Introduction to cost &amp; Managerial Accounting</td>
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<tr>
<td>ECON 1002</td>
<td>Introduction to Economics II</td>
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<tr>
<td>COMP 1404</td>
<td>Programming II</td>
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<tr>
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<td>Introductory Linear Algebra &amp; Analytical Geometry</td>
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<td>MATH 1151</td>
<td>Calculus II</td>
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### LEVEL II (65 credits)

#### SEMESTER 1

**CORE COURSES**

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<tbody>
<tr>
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<td>MATH 2140</td>
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<td>Mathematics of Finance I</td>
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<td>MGMT2023</td>
<td>Financial Management I</td>
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#### SEMESTER 2

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<tr>
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<td>MATH 2160</td>
<td>Analysis and Mathematical Methods II</td>
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<td>MATH 2150</td>
<td>Introduction to Statistics</td>
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<td>MATH 2220</td>
<td>Introduction to Actuarial Mathematics</td>
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#### LEVELS III

#### SEMESTER 1

<table>
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<td>Financial Management II</td>
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<td>MATH 3351</td>
<td>Regression and Time Series Analysis</td>
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<tr>
<td>MATH 3310</td>
<td>Life Contingencies</td>
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### LEVELS I/III (65 credits)

#### SEMESTER 1

**CORE COURSES**

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<tbody>
<tr>
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<td>Mathematics of Finance</td>
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<td>Life Contingencies</td>
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#### SEMESTER 2

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<tbody>
<tr>
<td>MATH 2220</td>
<td>Introduction to Actuarial Mathematics</td>
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**ELECTIVES:**

Four (4) credits from:

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 3320</td>
<td>Risk Theory</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3321</td>
<td>Principles of Asset/Liability Management for Actuarial Science</td>
<td>4</td>
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### ELECTIVE COURSES (7 CREDITS)

Students may select any level III courses in or outside the faculty.

### FOUNDATION COURSES (9 CREDITS)

<table>
<thead>
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<tr>
<td>FOUN 1102</td>
<td>Academic Writing for Different Disciplines</td>
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<tr>
<td>FOUN 1301</td>
<td>Law, Governance, Economy and Society</td>
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# Minor in Actuarial Science

(16 CREDITS)

## COURSE LISTING

### CORE COURSES (12 credits)

#### LEVELS II/III

<table>
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<tr>
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<td>Mathematics of Finance</td>
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### SEMESTER 2

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 2220</td>
<td>Introduction to Actuarial Mathematics</td>
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**ELECTIVES:**

Four (4) credits from:

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 3320</td>
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<td>4</td>
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Return to Table of Contents
Faculty of Science & Technology Online
## DEPARTMENT OF PHYSICS

The following list indicates courses to be taught in 2012/2013.

### SEMESTER 1

<table>
<thead>
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<td>PHYS 1110</td>
<td>Introductory Physics I (Remedial Only)</td>
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<td>PHYS 1211</td>
<td>Introduction to Mechanics and Heat</td>
<td>3</td>
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<td>PHYS 1213</td>
<td>Introduction to Oscillations and Waves</td>
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<td>PHYS 1214</td>
<td>Introductory Physics Laboratory I</td>
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<tr>
<td>PHYS 2280</td>
<td>Mathematical Methods in Physics</td>
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<td>PHYS 2281</td>
<td>Modern Physics I</td>
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<tr>
<td>PHYS 2290</td>
<td>Introduction to Medical Physics and Bioengineering</td>
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<td>PHYS 2291</td>
<td>Digital Electronics</td>
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<tr>
<td>PHYS 2292</td>
<td>Meteorology, Climatology and Pollution (to be offered in 2013/2014)</td>
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<tr>
<td>PHYS 2294</td>
<td>Materials Science</td>
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<td>Electronics and Control Theory</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3385</td>
<td>Electromagnetism Theory &amp; Applications</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3387</td>
<td>Research Project</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3390</td>
<td>Further Medical Physics and Bioengineering (to be offered in 2013/2014)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3392</td>
<td>Physical Oceanography and Geohydrology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3396</td>
<td>Ceramics</td>
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</tbody>
</table>

### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHYS 0071</td>
<td>Preliminary Physics II*</td>
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<tr>
<td>PHYS 1111</td>
<td>Introductory Physics II (Remedial Only)</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 1212</td>
<td>Introduction to Electricity &amp; Magnetism and Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1215</td>
<td>Introductory Physics Laboratory II</td>
<td>1.5</td>
</tr>
<tr>
<td>PHYS 1216</td>
<td>Introduction to Optics</td>
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</tr>
<tr>
<td>PHYS 1001</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2282</td>
<td>Circuit Theory and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2283</td>
<td>Oscillation, Waves and Optics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2293</td>
<td>Fundamentals of Geophysics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2295</td>
<td>Lasers and Solar Energy</td>
<td>4</td>
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<tr>
<td>PHYS 3381</td>
<td>Modern Physics II</td>
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</tr>
<tr>
<td>PHYS 3383</td>
<td>Optics and Astronomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3384</td>
<td>Thermodynamics and Solid State Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3391</td>
<td>Further Digital Electronics and Microprocessor Systems</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3393</td>
<td>Earth Materials, Earth Processes and Seismology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3394</td>
<td>Further Materials Science</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3395</td>
<td>Thin Films and Vacuum Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

*Taught by Open Campus; not counted towards the credit requirements for the award of the BSc Degree.


2. Students repeating a course may carry over the practical coursework mark for a maximum of two (2) years. However the theory coursework must be repeated. Please consult with the Head of Department.

3. Students repeating PHYS 1110 Introductory Physics I and PHYS 1111 Introductory Physics II can register for these courses or opt to do the new equivalent theory courses provided that students have passed the practical components of the course.
# Major in Physics

(32 CREDITS)

## COURSE LISTING

### PREREQUISITES

#### LEVEL I

#### SEMESTER 1

<table>
<thead>
<tr>
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<tr>
<td>PHYS 1110</td>
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<tr>
<td>PHYS 1211</td>
<td>Introduction to Mechanics and Heat</td>
<td>3</td>
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<tr>
<td>PHYS 1213</td>
<td>Introduction to Oscillations and Waves</td>
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<tr>
<td>PHYS 1214</td>
<td>Introductory Physics Laboratory I</td>
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#### SEMESTER 2

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<th>Course Title</th>
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<tr>
<td>PHYS 1111</td>
<td>Introductory Physics II</td>
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<tr>
<td>PHYS 1212</td>
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<tr>
<td>PHYS 1216</td>
<td>Introduction to Optics</td>
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#### CORE COURSES (32 CREDITS)

#### LEVEL II/III

#### SEMESTER 1

<table>
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<th>Credits</th>
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<td>PHYS 2280</td>
<td>Mathematical Methods in Physics</td>
<td>4</td>
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<td>PHYS 2281</td>
<td>Modern Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3385</td>
<td>Electromagnetic Theory &amp; Applications</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3387</td>
<td>Research Project</td>
<td>4</td>
</tr>
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<tbody>
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<td>Oscillation, Waves and Optics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3381</td>
<td>Modern Physics II</td>
<td>4</td>
</tr>
<tr>
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<td>Optics and Astronomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3384</td>
<td>Thermodynamics and Solid State Physics</td>
<td>4</td>
</tr>
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# Physics Minors

## ELECTRONICS MINOR

(16 CREDITS)

#### LEVEL II/III

#### SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHYS 2291</td>
<td>Digital Electronics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3382</td>
<td>Electronics &amp; Control Theory</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2282</td>
<td>Circuit Theory and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3391</td>
<td>Further Digital Electronics &amp; Microprocessor Systems</td>
<td>4</td>
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</table>

## ENVIRONMENTAL PHYSICS MINOR

ANY 16 CREDITS FROM THE FOLLOWING:

#### LEVEL II/III

#### SEMESTER 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHYS 2292</td>
<td>Meteorology, Climatology and Pollution</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3392</td>
<td>Physical Oceanography and Geohydrology</td>
<td>4</td>
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#### SEMESTER 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHYS 2293</td>
<td>Fundamentals of Geophysics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2295</td>
<td>Lasers and Solar Energy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3393</td>
<td>Earth Materials, Earth Processes and Seismology</td>
<td>4</td>
</tr>
</tbody>
</table>
MATERIALS SCIENCE MINOR
ANY 16 CREDITS FROM THE FOLLOWING:
LEVEL II/III
SEMESTER 1
Course Code    Course Title    Credits
PHYS 2294     Materials Science  4
PHYS 3396     Ceramics            4

SEMESTER 2
Course Code    Course Title    Credits
PHYS 2295     Lasers and Solar Energy   4
PHYS 3394     Further Materials Science  4
PHYS 3395     Thin Films and Vacuum Physics  4

MEDICAL PHYSICS & BIOENGINEERING
MINOR
(16 credits)
LEVEL II/III
SEMESTER 1
Course Code    Course Title    Credits
PHYS 2290     Introduction to Medical Physics and Bioengineering  4
PHYS 2291     Digital Electronics        4
PHYS 3390     Further Medical Physics and Bioengineering  4

SEMESTER 2
Course Code    Course Title    Credits
PHYS 3391     Further Digital Electronics & Microprocessor Systems  4

Note: A student cannot declare a minor in both Electronics and Medical Physics and Bioengineering.

SECTION VIII:
COURSE DESCRIPTIONS
ALPHABETICAL LISTING BY COURSE CODES

LEVEL: I
SEMESTERS: 1
COURSE CODE: ACCT 1002
COURSE TITLE: INTRODUCTION TO FINANCIAL ACCOUNTING
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: An introductory course designed for students of accounting and those in other areas of study. It aims at producing a practical and theoretical understanding of the principles and concepts involved in the preparation of financial statements. Students are exposed to conceptual analytical approach with the aim of improving their critical thinking and communicative skills.
Assessment:
Coursework 25%
Final Examination 75%

LEVEL: I
SEMESTERS: 2
COURSE CODE: ACCT 1003
COURSE TITLE: INTRODUCTION TO COST & MANAGERIAL ACCOUNTING
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This is an introductory course for students of accounting as well as other areas of study. It aims to acquaint them with the uses of accounting information and techniques useful to the manager in planning, decision-making and controlling organisational activities.
Assessment:
Coursework 25%
Examination 75%
LEVEL: II
SEMESTER: 1
COURSE CODE: ACCT 2017
COURSE TITLE: MANAGEMENT ACCOUNTING
NUMBER OF CREDITS: 3
PREREQUISITES: ACCT 1002 AND ACCT 1003
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: The course explains how managerial accounting information is used by managers in manufacturing, retail, service and not-for-profit organisations to anticipate the future and monitor the activities of the business.
Assessment:
Coursework 25%
Final Examination 75%

LEVEL: I
SEMESTER: 1
COURSE CODE: AGBU 1005
COURSE TITLE: INTRODUCTION TO MICROECONOMICS
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: I
SEMESTER: 2
COURSE CODE: AGBU 1002
COURSE TITLE: INTRODUCTION TO AGRO-ENVIRONMENTAL MANAGEMENT
NUMBER OF CREDITS: 4
PREREQUISITES: NONE
CO-REQUISITES:
COURSE DESCRIPTION: The role and importance of the environment for social development and as a life support system. The nexus between agriculture and the environment. Agro-ecosystems structure and dynamics.
Economics of environmental resources: market failure and environmental degradation, externalities and public goods; optimal resource use/extraction and approaches for management of renewable resources.
Concept of the watershed as a management unit: hydrology, soils, natural forest, biodiversity and land use. The impact of agricultural practices on the environment viewed from an ecosystem perspective: deforestation, soil erosion/degradation, flooding, irrigation, loss of biodiversity and climate change. Case studies of impacts related to various agricultural systems: crop and livestock, subsistence and plantation farming, hillslope and erodible soils, pesticide and chemical application, irrigated agriculture.
Integration of the concepts and issues discussed in designing sustainable agro-environmental systems for the tropics; focus on small island states. Case studies.
Assessment:
Coursework 40%
Final Examination 60%
LEVEL: I
SEMESTER: 1
COURSE CODE: AGSL 1000
COURSE TITLE: SOILS AND THE ENVIRONMENT
NUMBER OF CREDITS: 4
PREREQUISITES: NONE
COURSE DESCRIPTION: Soil texture, structure, aeration, water relations, evapotranspiration, climatic factors and their measurements; impact of local climate and climate near the ground on agriculture; agriculture and the environment. Chemical nature and properties of clays, soil organic matter, ion exchange and soil reaction; agricultural importance of soil components; soil chemical constraints and availability of N, P, K, Ca, Mg and minor elements; amelioration of chemical behaviour of soils.
Assessment:
Coursework  25%
Final Examination  75%

LEVEL: III
SEMESTER: 2
COURSE CODE: AGSL 3002
COURSE TITLE: SOIL SURVEY AND LAND EVALUATION
NUMBER OF CREDITS: 4
PREREQUISITES: AGSL1000 OR GEOM 1011, GEOM 1015 AND GEOM 1030
COURSE DESCRIPTION: Principles of soil ecology and soil habitation - faunal and floral interactions with soil properties; kinds, classes, and field techniques in soil surveys; Aerial photographic interpretation; Remote sensing, GIS and their applications; soil and land capability classification; Use and interpretation of soil and land capability maps; Land evaluation techniques.
Assessment:
Coursework  40%
Final Examination  60%

LEVEL: III
SEMESTER: 1
COURSE CODE: AGSL 3004
COURSE TITLE: INTEGRATED WATERSHED MANAGEMENT
NUMBER OF CREDITS: 4
PREREQUISITES: AGSL 1000
COURSE DESCRIPTION: The hydrologic cycle; rainfall, runoff/stream flow measurement and analysis; rainfall-runoff models; the watershed and its ecosystem; biogeochemical and nutrient cycles; integrated watershed management principles and planning; soil and water resources conservation practices; watershed degradation and restoration; soil erosion and control; water quality and yield improvement; the role of forestry/agro-forestry; socio-economic, legal and institutional aspects. Case studies and field trips.
Assessment:
Coursework  25%
Final Examination  75%

LEVEL: 0 (PRELIMINARY)
SEMESTER: 1
COURSE CODE: BIOL 0061
COURSE TITLE: PRELIMINARY BIOLOGY I
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC OR EQUIVALENT PASS IN BIOLOGY
COURSE DESCRIPTION: An introduction to Cell and Plant Biology including the ultra-structure of plant and animal cells; comparison between prokaryotic and eukaryotic cells; structure and function of micro- and macro-molecules; enzymes; respiration and photosynthesis. Introduction of the Plant Kingdom, plant anatomy, morphology and physiology to include water relations, ion uptake, mineral nutrition; regulation of growth and development by hormonal and environmental factors.
Assessment:
Coursework  50%
Theory  20%
Practical  30%
Final Examination  50%

LEVEL: 0 (PRELIMINARY)
SEMESTER: 2
COURSE CODE: BIOL 0062
COURSE TITLE: PRELIMINARY BIOLOGY II
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC OR EQUIVALENT PASS IN BIOLOGY
COURSE DESCRIPTION: Introduction to the Animal Kingdom; relationships between structure and function of the mammalian body including the gross anatomy and tissue structure of the various organ systems. Basic principles of Mendelian and Molecular genetics including the physical and chemical basis of inheritance; DNA replication, recombinant DNA and DNA fingerprinting. Introduction to Ecology including ecosystems, energy flow and trophic levels, nutrient cycling and environmental issues.
Assessment:
Coursework  50%
Theory  20%
Practical  30%
Final Examination  50%
LEVEL: I  
SEMESTER: 1  
COURSE CODE: BIOL 1065  
COURSE TITLE: DIVERSITY OF PLANTS AND ANIMALS  
NUMBER OF CREDITS: 4  
PREREQUISITES: PASSES IN 2 CAPE/GCE A-LEVEL SUBJECT OR EQUIVALENT  
COURSE DESCRIPTION: An introduction to the diversity of plants and animals. The characteristics, range of structure, reproduction, life cycles and habits of selected plant and animal groups will be covered.  
Assessment:  
Coursework 40%  
Final Examination 60%

LEVEL: I  
SEMESTER: 1  
COURSE CODE: BIOL 1262  
COURSE TITLE: LIVING ORGANISMS I  
NUMBER OF CREDITS: 3  
PREREQUISITES: (CAPE BIOLOGY (UNITS I AND II) OR (BIOL 0061 & BIOL 0062) OR GCE A-LEVEL BIOLOGY  
COURSE DESCRIPTION: An introduction to the major groups of prokaryotes, autotrophic protists and plants, their evolutionary associations, and adaptive radiation. Explores ideas about the origin of the prokaryotes and the evolution and diversity of photosynthetic organisms. It is a prerequisite for advanced biology courses in the Department of Life Sciences.  
Assessment:  
Coursework 50%  
Theory 30%  
Practical 20%  
Final Examination 50%

LEVEL: I  
SEMESTER: 1  
COURSE CODE: BIOL 1263  
COURSE TITLE: LIVING ORGANISMS II  
NUMBER OF CREDITS: 3  
PREREQUISITES: (CAPE BIOLOGY (UNITS I AND II) OR (BIOL 0061 & BIOL 0062) OR GCE A-LEVEL BIOLOGY  
COURSE DESCRIPTION: An introduction to the diversity of animals and fungi. Students are introduced to animals, their evolutionary associations, and adaptive radiation; and fungi as decomposers, symbionts, and pathogens. It is a prerequisite for advanced biology courses in the Department of Life Sciences  
Assessment:  
Coursework 50%  
Theory 30%  
Practical 20%  
Final Examination 50%

LEVEL: I  
SEMESTER: 2  
COURSE CODE: BIOL 1362  
COURSE TITLE: BIOCHEMISTRY I  
NUMBER OF CREDITS: 3  
PREREQUISITES: (CAPE BIOLOGY (UNITS I AND II) OR (BIOL 0061 & BIOL 0062) OR GCE A-LEVEL BIOLOGY  
COURSE DESCRIPTION: This course provides an introductory treatment of concepts in Biochemistry. In many regards, students will be learning a vast new language as well as new insight into the molecular logic of life - how the structure/form of molecules is related to their diverse functions.  
Assessment:  
Coursework 40%  
Final Examination 60%

LEVEL: I  
SEMESTER: 2  
COURSE CODE: BIOL 1364  
COURSE TITLE: GENETICS I  
NUMBER OF CREDITS: 3  
PREREQUISITES: (CAPE BIOLOGY (UNITS I AND II) OR (BIOL 0061 & BIOL 0062) OR GCE A-LEVEL BIOLOGY  
COURSE DESCRIPTION: This course aims to present an introduction to the basic principles of genetics and will equip students with the necessary foundation for advanced level courses in biology and biochemistry.  
Assessment:  
Coursework 50%  
Final Examination 50%

LEVEL: I  
SEMESTER: 2  
COURSE CODE: BIOL 1462  
COURSE TITLE: GENERAL ECOLOGY AND BIOMETRY (TO BE DISCONTINUED WITH EFFECT FROM 2013/14)  
NUMBER OF CREDITS: 6  
PREREQUISITES: CAPE/GCE A-LEVEL PASS IN BIOLOGY OR ENVIRONMENTAL SCIENCE OR PASSES IN BIOL0061 & BIOL0062, OR BIOL 1065 OR EQUIVALENT.  
COURSE DESCRIPTION: An introductory treatment of ecology and data analysis. Topics include population ecology, community ecology, ecosystem ecology, geographic ecology, descriptive statistics, inferential statistics, independence and probability, simple linear regression and correlation.  
Assessment:  
Coursework 40%  
Final Examination 60%
Assessment:  
Coursework 40%  
Final Examination 60%  

LEVEL: II  SEMESTER: 1  COURSE CODE: BIOL 2063  COURSE TITLE: MARINE ECOLOGY  NUMBER OF CREDITS: 4  PREREQUISITES: BIOL 1462 - AT LEAST GRADE B  COURSE DESCRIPTION: Topics on basic oceanography including bathymetry and topography of the ocean floor; plate tectonics and continental drift; physical and chemical properties of sea water; atmospheric and oceanic circulation; tides; form and function of planktonic organisms; primary and secondary organic production and zooplankton distribution including sub tidal shallow sea, deep sea, hydrothermal vent communities and intertidal benthic communities.; Coral reef biology; biology of marine mammals.  
Practicals include time at sea.  
Assessment:  
Coursework 40%  
Final Examination 60%  

LEVEL: II  SEMESTER: 1  COURSE CODE: BIOL 2162  COURSE TITLE: ADVANCED GENETICS  NUMBER OF CREDITS: 4  PREREQUISITES: BIOL 1061 OR BIOL 1364 OR (AGRI 1013 AND AGRI 1011)  COURSE DESCRIPTION: A study of prokaryotic and eukaryotic genetics. Topics include DNA structure and replication; gene expression and regulation; recombination in prokaryotes, complementation and recombination mapping, gene fine structure analysis and evolution of the concepts of a gene; changes in chromosome structure and number - their transmission and evolutionary significance.  
Assessment:  
Coursework 40%  
Final Examination 60%  

Assessment:  
Coursework 40%  
Final Examination 60%  

LEVEL: II  SEMESTER: 2  COURSE CODE: BIOL 2361  COURSE TITLE: BIOMOLECULES AND ENERGY METABOLISM  NUMBER OF CREDITS: 4  PREREQUISITES: BIOL 1061 OR BIOL 1362  COURSE DESCRIPTION: Chemistry of nucleic acids, control and regulation of gene expression; microbiology - structure of microorganisms, their morphology and organisation; sensory systems - biochemistry of vision; olfaction and gustation; introduction to neurotransmission; neurotransmitters.  
Assessment:  
Coursework 40%  
Final Examination 60%
LEVEL: II
SEMESTER: 1
COURSE CODE: BIOL 2363
COURSE TITLE: METABOLISM
NUMBER OF CREDITS: 4
PREREQUISITES: CHEM 1060 AND EITHER BIOL 1061 OR BIOL 1362
COURSE DESCRIPTION: Enzymology - regulation of enzyme activity, modification of expression levels of enzymes, protein-protein interaction; Nitrogen metabolism- sources, uses, storage, transportation and excretion; amino acid metabolism - endogenous and exogenous sources, transamination reaction mechanism, degradation, clinical implications of amino acid dysfunctions; porphyrins - synthesis, degradation and clinical implications of biosynthetic and degradation dysfunctions; lipid metabolism- synthesis, degradation, storage, mobilisation; Biosynthesis of carbohydrates - pentose phosphate pathway; gluconeogenesis - mitochondrial and cytoplasmic regulation, glycogen metabolism - degradation and biosynthesis. Regulation of glycogen metabolism as a case study in control mechanisms; hormones - general characteristics and regulation of hormone action Pathways and control mechanisms for the metabolism of lipids, amino acids and nitrogen. Carbohydrate biosynthesis.. integration of metabolism - management and regulation of energy molecules with respect to different metabolic states.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: II
SEMESTER: 2
COURSE CODE: BIOL 2364
COURSE TITLE: ADVANCED GENERAL BIOCHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITES: EITHER BIOL1061 OR BIOL 1362 AND CHEM 1060: STUDENT MUST HAVE ATTEMPTED BIOL 2361 AND BIOL 2363
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: II
SEMESTER: 1
COURSE CODE: BIOL 2365
COURSE TITLE: COMPARATIVE BIOCHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 1061 OR AGRI 1013 OR BIOL 1362 AND EITHER CHEM 1062 OR CAPE /GCE A’LEVEL/ PASS IN CHEMISTRY OR (CHEM 0060 & CHEM 0061)
COURSE DESCRIPTION: This course builds on the materials covered in the Year 1 Cell Biology/Biochemistry course and prepares the students majoring in Biology to have a deeper appreciation of the content that will be covered in several core courses (e.g. Molecular Biology, Plant Physiology, Animal Physiology, Plant Biotechnology, and Microbiology).
It equips students to appreciate modern Biochemistry and its importance for understanding Biology. By imparting knowledge of the processes taking place at the cellular and organelle level in plants, animals and microorganisms it provides the basis for a deeper understanding of key concepts in Biology viz. Unity in Diversity; structure/Function relationships (Bioselectivity); homeostasis (Equilibrium); Energy relations (Bioenergetics); Rate control; Signaling (Inter-and intra-cellular communication). Topics include a more in-depth coverage of the major biomolecules from a comparative perspective with emphasis on their structure/function relationships; enzyme mechanism and control of enzyme activity; selected pathways of carbohydrate, nitrogen and lipid Metabolism; cell signaling and integrated metabolism.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: II
SEMESTER: 1
COURSE CODE: BIOL 2461
COURSE TITLE: HUMANS AND THE ENVIRONMENT
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 1462
Assessment:
Coursework 40%
Final Examination 60%
LEVEL: II  
SEMESTER: 1  
COURSE CODE: BIOL 2462  
COURSE TITLE: CARIBBEAN ISLAND ECOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1462 (AT LEAST A GRADE B)  
COURSE DESCRIPTION: This advanced course treats the islands of the Caribbean within a global perspective. Its subject matter is the special nature of island environments and their biotas, and its aim is an understanding of the distributions and ecological relationships of island plants and animals through an analysis of their origins, evolutionary past population biology and community structure. The course is expected to integrate much of the knowledge that advanced undergraduates have amassed.  
Assessment:
Coursework 40%  
Final Examination 60%  

LEVEL: II  
SEMESTER: 2  
COURSE CODE: BIOL 2761  
COURSE TITLE: PLANT PHYSIOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1061 OR (BIOL1362 AND BIOL1364) AND BIOL 1764 OR BIOL 1261 OR BIOL1065 AND AGRI 1012  
COURSE DESCRIPTION: An advanced treatment of plant physiology and selected aspects of cellular metabolism. Topics include water relations of cells, tissues and whole plants; germination, seedling development, growth, differentiation and growth analysis; mineral uptake and plant nutrition; photosynthesis, translocation and sink / source relationships; roles and applications of hormones and growth regulators.  
Assessment:
Coursework 40%  
Final Examination 60%  

LEVEL: II  
SEMESTER: 2  
COURSE CODE: BIOL 2862  
COURSE TITLE: ANIMAL PHYSIOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1861 OR BIOL 1261 OR BIOL 1065 AND AGRI 1012  
COURSE DESCRIPTION: Processes and fundamental concepts in gaseous exchange, metabolism, temperature regulation, osmoregulation, haemodynamics of blood circulation and fundamental concepts in sensory, neural and muscle physiology.  
Assessment:
Coursework 40%  
Final Examination 60%  

LEVEL: II  
SEMESTER: 2 (OFFERED IN ALTERNATE YEARS - WILL NOT BE OFFERED IN 2013/2014)  
COURSE CODE: BIOL 2864  
COURSE TITLE: PARASITISM  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1861 OR BIOL 1261 OR BIOL 1261 OR BIOL 1065 AND AGRI 1012 OR AGLS 1001  
Assessment:
Coursework 40%  
Final Examination 60%  

LEVEL: II  
SEMESTER: 2 (OFFERED IN ALTERNATE YEARS - WILL NOT BE OFFERED IN 2012/2013)  
COURSE CODE: BIOL 2866  
COURSE TITLE: ENTOMOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1861 OR BIOL 1261 OR BIOL 1065 AND AGRI 1012  
Assessment:
Coursework 40%  
Final Examination 60%  

LEVEL: III  
SEMESTER: 1  
COURSE CODE: BIOL 3061  
COURSE TITLE: MOLECULAR BIOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 2162 OR BIOL 2362  
COURSE DESCRIPTION: An advanced treatment of gene and genome organisation in eukaryotes and gene regulation in prokaryotes and eukaryotes. Recombinant DNA technology and its application, including vectors, restriction enzymes and restriction mapping, construction of libraries and gene isolation, construction and use of RFLP maps. DNA fingerprinting, analysis and sequencing of genes. PCR and its applications.  
Assessment:
Coursework 40%  
Final Examination 60%
LEVEL: III
SEMESTER: 2
COURSE CODE: BIOL 3062
COURSE TITLE: CONSERVATION BIOLOGY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 1462 OR EQUIVALENT
STUDENTS ARE ALSO ADVISED TO DO AGRI 1013 OR BIOL 1362
COURSE DESCRIPTION: Principles of conservation biology including types and distribution of biodiversity, loss of biodiversity and its consequences; endangered species; population viability analysis and monitoring. Conservation practices: protected areas, biosphere reserves, restoration ecology; ex situ conservation strategies and genetic engineering; establishing new populations by translocation and reintroduction. Legal and institutional aspects: Land tenure systems and species and habitat protection; national legislation; conservation authorities and organisations; international programmes; international conservation treaties and conventions; conservation education.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: III
SEMESTER: 3 (SUMMER)
COURSE CODE: BIOL 3068
COURSE TITLE: FIELD COURSE IN NEOTROPICAL ECOLOGY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 1462 AND 8 CREDITS OF ADVANCED LEVEL LIFE SCIENCES COURSES, OR PERMISSION OF THE HEAD OF DEPARTMENT
COURSE DESCRIPTION: Introduction to focal group, ecological principles illustrated by focal group, specialised features of focal group, field research projects (aquatic or terrestrial). Students must consult with the course coordinator before registering for this course.
Assessment:
Coursework 100%
Oral Report 10%
Written Work 90%

LEVEL: III
SEMESTER: 2
COURSE CODE: BIOL 3262
COURSE TITLE: MICROBIAL BIOTECHNOLOGY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 2261 OR BIOL 2263 OR BIOL 2363 AND BIOL 2362 OR AGRI 1012
COURSE DESCRIPTION: Advanced treatment of applications of microbiology including microbial ecology and symbiotic relationships; pathogenesis in plants / animals; principles of immunology; food spoilage and processing; single cell protein production, sewage treatment; microbial leaching and genetic engineering. Other special topics dealt with are photosynthesis - anaplerotic and respiratory systems in bacteria; use of radioisotopes in microbiology; Strictland reactions; amino acid production, industrial - and organic acid fermentation.
Assessment:
Coursework 40%
Final Examination 60%
LEVEL: III
SEMESTER: 2
COURSE CODE: BIOL 3264
COURSE TITLE: FUNCTIONAL DESIGN IN BIOLOGY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL1261 OR (BIOL1065 AND AGRI 1012)
COURSE DESCRIPTION: Size as a consideration in the design of organisms, materials in nature, the arrangement of structure, physics of support, mechanics of motility, viscosity and flow, pressure and flow. Examples are taken from various taxa across kingdoms, as appropriate, to illustrate the topics discussed.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: III
SEMESTER: 1
COURSE CODE: BIOL 3361
COURSE TITLE: APPLIED BIOCHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITE: BIOL 2364
COURSE DESCRIPTION: Animal cell culture and virology. Introduction to cell and tissue culture, practical aspects and applications; introduction to virology, effect of viruses on host cells. Immunology: natural and acquired immunity both humoral and cellular; antibody structure and function, B cells - generation of antibody diversity; function of T cells; complement - activation, control and biological effects. HLA - nomenclature, typing and its uses, autoimmunity, AIDS. Animal detoxification - absorption & distribution of xenobiotics, toxic effects, metabolism.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: III
SEMESTER: 2
COURSE CODE: BIOL 3362
COURSE TITLE: SELECTED TOPICS IN BIOCHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITES: BIOL 2361 AND BIOL 2364
COURSE DESCRIPTION: The areas of study may vary slightly from year to year but will usually include:- Metabolic diseases- obesity and diabetes mellitus. Mechanisms of signal transduction and apoptosis, biochemistry of cancer and therapy. Neurochemistry, and mechanisms of signal transduction.
Assessment:
Coursework 40%
Final Examination 60%
LEVEL: III  
SEMESTER: 1  
COURSE CODE: BIOL 3463  
COURSE TITLE: POLLUTION & ENVIRONMENTAL MANAGEMENT  
NUMBER OF CREDITS: 4  
PREREQUISITE: BIOL 2461  
Assessment:  
Coursework 40%  
Final Examination 60%

LEVEL: III  
SEMESTER: 2  
COURSE CODE: BIOL 3464  
COURSE TITLE: TROPICAL FOREST ECOLOGY AND MANAGEMENT  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1065 OR BIOL 1462 OR BIOL1261  
COURSE DESCRIPTION: An advanced treatment of topics in tropical forest ecology and management. Topics include biotic and abiotic factors, biotic interactions including regulation of biodiversity, succession and regeneration and nutrient cycling in tropical forest ecosystems. Disturbances and tropical forest management including the history of forestry in the wet tropics; tropical forest inventory; tropical forestry towards sustainability; plantation forestry in the wet tropics; social dimensions and the future of tropical forest management.  
Assessment:  
Coursework 40%  
Final Examination 60%

LEVEL: III  
SEMESTER: 2  
COURSE CODE: BIOL 3662  
COURSE TITLE: EVOLUTION AND BIOSYSTEMATICS  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 1061 OR BIOL1364 OR (AGRI 1011 AND AGRI 1013)  
COURSE DESCRIPTION: An advanced treatment of population genetics, evolution and methods of biosystematics. Topics include the H-W model; evolutionary forces; neutral theory vs. selectionist theory; macroevolution; co-evolution and biogeography; speciation: the biological species concept, isolating mechanisms; within species variation and micro taxonomy; morphological, chemical and molecular systematics; derivation of cladograms; formulation classifications; biological nomenclature. Case studies.  
Assessment:  
Coursework 40%  
Final Examination 60%

LEVEL: III  
SEMESTER: 2  
COURSE CODE: BIOL 3762  
COURSE TITLE: PLANT BIOTECHNOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: BIOL 2162 OR BIOL 2362 & BIOL 2363  
Assessment:  
Coursework 40%  
Final Examination 60%
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<td>COURSE CODE: BIOL 3763</td>
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<tr>
<td>COURSE TITLE: CROP IMPROVEMENT</td>
<td>COURSE TITLE: PLANT ECOPHYSIOLOGY</td>
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<tr>
<td>(FORMERLY PLANT BREEDING)</td>
<td>NUMBER OF CREDITS: 4</td>
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<td>PREREQUISITES: BIOL 1462 AND BIOL 2761 OR AGRI 1012 AND AGRI 1016</td>
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<tr>
<td>PREREQUISITES: BIOL 2162 OR AGCP 2001</td>
<td>COURSE DESCRIPTION: This advanced course focuses on the interaction between plants and their environment, exploring the diverse ways that plants adapt to and manipulate their surroundings. Ecophysiology provides a framework for the many applications of plant science in the management of natural and manmade ecosystems. The course includes a large case study component that illustrates the importance of current research in supporting a range of sustainable ecosystems, from rainforest stands to cultivated fields. Students participate in developing their own case studies exploring the role of plant research in meeting the challenge of global climate change.</td>
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<td>Assessment:</td>
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<td>COURSE CODE: BIOL 3764</td>
<td>COURSE CODE: BIOL 3767</td>
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<tr>
<td>COURSE TITLE: ECONOMIC BOTANY</td>
<td>COURSE TITLE: BIOLOGY OF PLANT PATHOGENS (THIS COURSE REPLACES BIOL 3765 PLANT PATHOLOGY)</td>
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<td>PREREQUISITES: BIOL 1261 OR AGRI 1016 OR BIOL 1065 AND AGRI 1012</td>
<td>PREREQUISITES: EITHER (BIOL 1261 AND BIOL 1061 OR (BIOL 1362 AND BIOL 1364)) OR (AGRI 1012; AGRI 1011 AND AGRI 1013)</td>
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<tr>
<td>COURSE DESCRIPTION: Early domestication of plants and associated changes. Large-scale plantation crops - sugarcane, cocoa, coffee, citrus, and coconut. Products from secondary metabolites such as gums, dyes, resins, essential oils and spices, pharmaceuticals, narcotics. Fibres - origin, types, importance and utilisation by man. Timber production in the tropics and non-wood forest products. Under exploited plants. Ornamental horticulture.</td>
<td>COURSE DESCRIPTION: Biology of plant pathogens; Classification of plant pathogens; their cellular organization, structure; Important pathogens; Pathogen-life cycles, disease cycle; Symptomology; Epidemiology, spread, survival; Host-pathogen interactions, mechanism of infection, physiological and biochemical processes of infection; Host resistance and defense mechanisms; Principles of plant disease/pathogen management; Molecular-based pathogen detection and disease diagnosis.</td>
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<td>Semester: 1</td>
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<tr>
<td>Course Code: BIOL 3861</td>
<td>Course Code: BIOL 3865</td>
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<tr>
<td>Course Title: Animal Behaviour</td>
<td>Course Title: Animal Biotechnology</td>
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<td>Number of Credits: 4</td>
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<tr>
<td>Prerequisites: BIOL 2861 or BIOL 2862</td>
<td>Prerequisites: BIOL 2162 or BIOL 2362</td>
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<td>Course Description: Approaches to animal behaviour. Stimulus perception, processing, and motor control. The organisation of behaviour, and motivation. Instinct and learning. Development of behaviour in the individual. The evolution of behaviour. Signals and communication. Behavioural ecology of feeding, defence, reproduction and parental care. Social behaviour in insects and vertebrates.</td>
<td>Course Description: Definition and scope of biotechnology. A survey of important technological revolutions and their application to nutrition, health, genetic conservation and improvement of animals, including an advanced treatment of technologies such as genome projects, cell culture, cloning, science and practice of transgenesis and molecular marker technology and their applications to reproductive biotechnology, marker-assisted breeding, nutritional biotechnology, animal health and conservation of wildlife and breeds. The course consists of thirty-six (36) hours of lectures and six (6) three-hour laboratory sessions.</td>
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<td>Assessment: Coursework 40%</td>
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<td>Course Code: BIOL 3863</td>
<td>Course Code: CHEM 0060</td>
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<tr>
<td>Course Title: Tropical Aquaculture</td>
<td>Course Title: Preliminary Chemistry I</td>
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<td>Prerequisites: BIOL 1861 or BIOL 1261 or BIOL 1065 or AGLS 1001</td>
<td>Prerequisites: CSEC or Equivalent Pass in Chemistry</td>
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<td>Assessment: Coursework 40%</td>
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<td></td>
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<td>Final Examination - 3-hour written paper 75%</td>
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<tr>
<td>Course Code: BIOL 3864</td>
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<tr>
<td>Course Title: Fisheries Biology &amp; Management</td>
<td>Course Title: Preliminary Chemistry II</td>
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<tr>
<td>Number of Credits: 4</td>
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<tr>
<td>Prerequisite: BIOL 2063</td>
<td>Prerequisites: CSEC or Equivalent Pass in Chemistry</td>
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<td>Theory Coursework 10%</td>
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<td>Course Code: CHEM 0060</td>
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<tr>
<td>Course Title: Preliminary Chemistry I</td>
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<td>Prerequisites: CSEC or Equivalent Pass in Chemistry</td>
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<td>Final Examination - 3-hour written paper 75%</td>
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LEVEL: I
SEMESTER: 1
COURSE CODE: CHEM 1060 (REMEDIAL ONLY)
COURSE TITLE: INTRODUCTORY CHEMISTRY I
NUMBER OF CREDITS: 6
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT.
Assessment:
Practical Coursework 15%
Theory Coursework 10%
Final Examination - 3-hour written paper 75%

LEVEL: I
SEMESTER: 1
COURSE CODE: CHEM 1061 (REMEDIAL ONLY)
COURSE TITLE: INTRODUCTORY CHEMISTRY II
NUMBER OF CREDITS: 6
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT.
Assessment:
Practical Coursework 15%
Theory Coursework 10%
Final Examination - 3-hour written paper 75%

LEVEL: I
SEMESTER: 1
COURSE CODE: CHEM 1062
COURSE TITLE: BASIC CHEMISTRY FOR LIFE SCIENCES
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
COURSE DESCRIPTION: The course is intended to provide students, who have had very little exposure to chemistry and who intend to proceed to degree level in the Life and Health Sciences, with a working knowledge of the basic concepts and principles of Chemistry. Topics of study: atoms, bonding, (ionic and covalent) intermolecular forces, quantifying matter, classes of reactions; properties of ionic and covalent compounds; solution chemistry; acid-base equilibrium; reaction kinetics; thermochemistry; gases; properties and reactions of carbon compounds including alcohols, aldehydes and ketones, carboxylic acids, esters and ethers, amines and amides; amino acids and peptides, natural polymers and stereochemistry.
Assessment:
Coursework 40%
Final Examination - 2-hour written paper 60%

LEVEL: I
SEMESTER: 1
COURSE CODE: CHEM 1065
COURSE TITLE: INTRODUCTION TO CHEMISTRY LABORATORY
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT
COURSE DESCRIPTION: Chemical measures and units, manual graphing and simple statistics, basic chemistry laboratory skills and techniques, experimental planning, design and execution, basic symmetry and symmetry elements. Practical: Forty-eight (48) hours of practical work.
Assessment:
Practical Coursework 100%

LEVEL: I
SEMESTER: 1
COURSE CODE: CHEM 1066
COURSE TITLE: INTRODUCTION TO CHEMISTRY I
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT
COURSE DESCRIPTION: Atomic structure, group and periodic trends, chemical reactivity, fundamentals of bonding.
Assessment:
Coursework 40%
Final Examination - 2-hour written paper 60%
LEVEL: I  
SEMESTER: 2  
COURSE CODE: CHEM 1067  
COURSE TITLE: INTRODUCTION TO CHEMISTRY II  
NUMBER OF CREDITS: 3  
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT  
COURSE DESCRIPTION: Fundamentals of organic chemistry, introduction to chemical thermodynamics, reaction kinetics, chemical equilibria, d-block elements and coordination chemistry.  
Assessment:  
Coursework 40%  
Final Examination - 2-hour written paper 60%

LEVEL: I  
SEMESTER: 2  
COURSE CODE: CHEM 1068  
COURSE TITLE: INTRODUCTION TO CHEMISTRY III  
NUMBER OF CREDITS: 3  
PREREQUISITES: CHEM 0060 & CHEM 0061 OR CAPE CHEMISTRY OR EQUIVALENT  
CO-REQUISITE: CHEM 1067  
COURSE DESCRIPTION: Particle in a box, eigenvalues, harmonic oscillators, heat capacity, entropy, Gibbs free energy. Organic chemistry: addition, substitution, elimination and hydrolysis reactions.  
Assessment:  
Coursework 40%  
Final Examination - 2-hour written paper 60%

LEVEL: II  
SEMESTER: 1  
COURSE CODE: CHEM 2025  
COURSE TITLE: KINETICS AND MECHANISM  
NUMBER OF CREDITS: 4  
PREREQUISITES: AT LEAST TWO OF CHEM 2160, CHEM 2260 AND CHEM 2360  
COURSE DESCRIPTION: Theoretical aspects of chemical kinetics. Techniques for the study of slow and fast reactions. Photochemistry. General factors affecting reaction rates and mechanisms. Mechanisms of reactions with typical co-ordination polyhedra encountered in organic and inorganic chemistry; e.g., tetrahedral, square planar and octahedral geometries; linear free energy relationship.  
Practical: Thirty (30) hours of practical work.  
Assessment:  
Practical Coursework 15%  
Final Examination - 2-hour written paper 85%

LEVEL: II  
SEMESTER: 1  
COURSE CODE: CHEM 2160  
COURSE TITLE: MAIN GROUP CHEMISTRY  
NUMBER OF CREDITS: 4  
PREREQUISITES: CHEM 1060 AND CHEM 1061  
COURSE DESCRIPTION: Symmetry theory and point groups. Introduction to the chemistry of the elements. Chemistry of the hydrides, oxides and halides; organometallic chemistry of the p-block elements.  
Practical: Thirty (30) hours of practical work.  
Assessment:  
Practical Coursework 25%  
Final Examination - 2-hour written paper 75%

LEVEL: II  
SEMESTER: 2  
COURSE CODE: CHEM 2260  
COURSE TITLE: BASIC ORGANIC CHEMISTRY I  
NUMBER OF CREDITS: 4  
PREREQUISITES: CHEM 1060  
COURSE DESCRIPTION: Aromatic chemistry, carbon-carbon bond formation, principles of organic synthesis, principles of stereochemistry.  
Practical: Thirty (30) hours of practical work.  
Assessment:  
Practical Coursework 15%  
Theory Coursework 10%  
Final Examination 2-hour written paper 75%
LEVEL: II
SEMESTER: 1
COURSE CODE: CHEM 2360
COURSE TITLE: BASIC PHYSICAL CHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITES: CHEM 1061
COURSE DESCRIPTION: Nuclear chemistry. The behaviour of gases, liquids and solids; principles of surface and colloid chemistry; principles of electrochemistry.
Practical: Thirty (30) hours of practical work.
Assessment:
Practical Coursework 20%
Final Examination-2-hour written paper 80%

LEVEL: II
SEMESTER: 2
COURSE CODE: CHEM 2460
COURSE TITLE: PRINCIPLES OF CHEMICAL ANALYSIS
NUMBER OF CREDITS: 4
PREREQUISITES: CHEM 1060 AND CHEM 1061
COURSE DESCRIPTION: Introduction to qualitative and quantitative analysis; calibration of laboratory equipment; criteria for choice of a method of analysis; good laboratory practices; good measurement practices; methods of quantification; basic statistics in analytical chemistry; errors in chemical analysis; sampling and sample preparation for chemical analyses; applications of spectroscopic and chromatographic methods of analysis.
Practical: Thirty (30) hours of practical work.
Assessment:
Practical Coursework 15%
Theory Coursework 10%
Final Examination - 2-hour written paper 75%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3162
COURSE TITLE: CHEMISTRY OF METAL -CATALYZED TRANSFORMATIONS
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2160
COURSE DESCRIPTION: The applications of metals and their compounds in industrial and chemically significant transformations; some processes of local significance such as the synthesis of ammonia and petrochemicals as well as bioinorganic processes. Process control variables in homogeneous, heterogeneous and phase transfer catalysis and a survey of the active sites of metalloenzymes in light harvesting molecules, oxygen transport, nitrogen fixation and electron transfer processes.
Assessment:
Theory Coursework 50%
Final Examination - 2-hour written paper 50%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3163
COURSE TITLE: CHEMISTRY OF TECHNOLOGICALLY IMPORTANT MATERIALS
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2160
COURSE DESCRIPTION: The properties, characterization and applications of various advanced technologically important materials such as Liquid Crystals for LCD applications, Semiconductors for electronic device and Solar Cell applications, lanthanide phosphors for LED applications and Nanomaterials.
Assessment:
Theory Coursework 50%
Final Examination - 2-hour written paper 50%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3167
COURSE TITLE: ADVANCED INORGANIC CHEMISTRY
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2160
COURSE DESCRIPTION: Application of Group Theory to bonding. LCAO and LGO description of bonding. Chemistry of the First Row Transition Metals including effects of Crystal Field Stabilisation Energy; physical, chemical and magnetic properties. Organometallic chemistry.
Assessment:
Theory Coursework 25%
Final Examination 2-hour written paper 75%

LEVEL: III
SEMESTER: 1
COURSE CODE: CHEM 3267
COURSE TITLE: BASIC ORGANIC CHEMISTRY II
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2260
Assessment:
Theory Coursework 25%
Final Examination - 2-hour written paper 75%
LEVEL: III
SEMESTER: 1
COURSE CODE: CHEM 3268
COURSE TITLE: CHEMISTRY OF NATURAL PRODUCTS
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2260
Assessment:
Theory Coursework 25%
Final Examination - 2-hour written paper 75%

LEVEL: III
SEMESTER: 1
COURSE CODE: CHEM 3269
COURSE TITLE: ORGANIC SYNTHESIS
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2260 AND CHEM 3267
Assessment:
Theory Coursework 25%
Final Examination - 2-hour written paper 75%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3367
COURSE TITLE: THERMODYNAMICS AND STATISTICAL THERMODYNAMICS
NUMBER OF CREDITS: 3
PREREQUISITES: CHEM 2360
Assessment:
Theory Coursework 20%
Final Examination - 2-hour written paper 80%

LEVEL: III
SEMESTER: 1
COURSE CODE: CHEM 3467
COURSE TITLE: BASIC ANALYTICAL CHEMISTRY
NUMBER OF CREDITS: 6
PREREQUISITES: CHEM 2460
COURSE DESCRIPTION: Troubleshooting; methods of validation of analytical methods; application of statistics in experimental designs, process optimisation and decision-making; spectroscopic methods of analysis; separation techniques; ion-selective electrodes; biochemical methods of analysis.
Assessment:
Coursework 25%
Final Examination - 3-hour paper 75%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3468
COURSE TITLE: ADVANCED ANALYTICAL CHEMISTRY
NUMBER OF CREDITS: 6
PREREQUISITES: CHEM 2460
COURSE DESCRIPTION: Aspects of Laboratory management: Quality control and quality assurance; laboratory accreditation; hazardous waste management. Investigative techniques in chemistry; project planning and execution automated methods of analysis; modern spectroscopic methods of analysis; chromatographic and related techniques; radiochemical methods; polarography and related electrochemical methods; formulation science; analytical applications in forensic and clinical science, industry and the environment; the analytical chemist as an entrepreneur.
Assessment:
Coursework 25%
Final Examination - 3-hour paper 75%

LEVEL: III
SEMESTER: 2
COURSE CODE: CHEM 3560
COURSE TITLE: ENVIRONMENTAL CHEMISTRY
NUMBER OF CREDITS: 4
PREREQUISITES: AT LEAST THREE OF CHEM 2160, CHEM 2260, CHEM 2360, CHEM 2015, CHEM 2025, CHEM 2460
COURSE DESCRIPTION: Introduction to the structure of the environment; the physicochemical characteristics and processes of natural waters: equilibrium, redox, and microbiological reactions; function and processes in the atmosphere: major element cycles, ozone, climate change, acid rain, smog; characteristics of, and processes in soils; sources, effects and control of selected water, air and soil pollutants; introduction to environmental analytical chemistry.
Assessment:
Coursework 40%
Final Examination - 2-hour written paper 60%
<table>
<thead>
<tr>
<th>LEVEL: III</th>
<th>LEVEL: III AND 2</th>
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<tbody>
<tr>
<td>SEMESTER: 1</td>
<td>COURSE CODE: CHEM 3660</td>
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<tr>
<td>COURSE TITLE: RESEARCH PROJECT</td>
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<td>PREREQUISITES: AT LEAST THREE OF CHEM 2160; CHEM 2260; CHEM 2360; CHEM 2015</td>
<td>PREREQUISITES: AT LEAST THREE OF CHEM 2160; CHEM 2260; CHEM 2360; CHEM 2015</td>
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<td>COURSE DESCRIPTION: The project will be compulsory for all chemistry majors and will consist of 96 hours of practical work and the related requirements e.g. library work, lectures/seminars, meetings with supervisor(s), training on instruments etc. The student will be assigned a research problem carefully selected, bearing in mind the available time and resources, and will work under the supervision of a member of academic staff. The student will be required to do a literature review including an outline of the problem and the approach and methodology to be utilised. The student will plan and carry out experiments under supervision. On completion of the practical work, the student will be required to write up the project according to a specified format and submit the report by a given deadline for assessment. An oral presentation of ten minutes duration will also be required of the student at a public session to be held before the start of the semester final examinations.</td>
<td>COURSE DESCRIPTION: The project will be compulsory for all chemistry majors and will consist of 96 hours of practical work and the related requirements e.g. library work, lectures/seminars, meetings with supervisor(s), training on instruments etc. The student will be assigned a research problem carefully selected, bearing in mind the available time and resources, and will work under the supervision of a member of academic staff. The student will be required to do a literature review including an outline of the problem and the approach and methodology to be utilised. The student will plan and carry out experiments under supervision. On completion of the practical work, the student will be required to write up the project according to a specified format and submit the report by a given deadline for assessment. An oral presentation of ten minutes duration will also be required of the student at a public session to be held before the start of the semester final examinations.</td>
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<tr>
<td>Assessment: Written Report 60%</td>
<td>Assessment: Written Report 60%</td>
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<tr>
<td>Supervisor's Assessment 20%</td>
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<tr>
<td>Oral Presentation 20%</td>
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<td>SEMESTER: 2</td>
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<td>COURSE CODE: CHEM 3569</td>
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<td>COURSE TITLE: INDUSTRIAL CHEMISTRY I</td>
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<td>PREREQUISITES: AT LEAST THREE OF CHEM 2160, CHEM 2260, CHEM 2360, CHEM 2015</td>
<td>PREREQUISITES: AT LEAST THREE OF CHEM 2160, CHEM 2260, CHEM 2360, CHEM 2015</td>
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<tr>
<td>Assessment: Coursework 40%</td>
<td>Assessment: Coursework 40%</td>
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<tr>
<td>Final Examination - 2-hour written paper 60%</td>
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<td>SEMESTERS: 1 AND 2</td>
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<tr>
<td>COURSE CODE: COMP 1011</td>
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<tr>
<td>COURSE TITLE: INTRODUCTION TO INFORMATION TECHNOLOGY</td>
<td>COURSE TITLE: INTRODUCTION TO INFORMATION TECHNOLOGY</td>
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<tr>
<td>NUMBER OF CREDITS: 3</td>
<td>NUMBER OF CREDITS: 3</td>
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<td>PREREQUISITE: NONE</td>
<td>PREREQUISITE: NONE</td>
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<td>COURSE DESCRIPTION: This course will provide the knowledge needed to formulate a sound but basic understanding of Information Technology, its major components and its broad applications. Students will acquire hands-on experience with computers. They will become familiar with the components of a computer and learn about the various elements that make up an information system. The course deals with hardware, software, telecommunications and computer networks. General Topics: The Technology Revolution; Inside the Computer; Information Input and Output; Storing and Retrieving Information; Software; Networks and Networking; Internet and The Web. Practical Topics: Microsoft Package 2002 - Word, Excel, Access, PowerPoint and Front Page.</td>
<td>COURSE DESCRIPTION: This course will provide the knowledge needed to formulate a sound but basic understanding of Information Technology, its major components and its broad applications. Students will acquire hands-on experience with computers. They will become familiar with the components of a computer and learn about the various elements that make up an information system. The course deals with hardware, software, telecommunications and computer networks. General Topics: The Technology Revolution; Inside the Computer; Information Input and Output; Storing and Retrieving Information; Software; Networks and Networking; Internet and The Web. Practical Topics: Microsoft Package 2002 - Word, Excel, Access, PowerPoint and Front Page.</td>
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<tr>
<td>Assessment: Practical Coursework 50%</td>
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<tr>
<td>Project Report 25%</td>
<td>Project Report 25%</td>
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<td>Mid-term examination 25%</td>
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<tr>
<td>(NO FINAL WRITTEN EXAMINATION)</td>
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LEVEL: I  
SEMESTER: I  
COURSE CODE: COMP 1400  
COURSE TITLE: PROGRAMMING I  
NUMBER OF CREDITS: 3  
PREREQUISITE: TWO UNITS OF CAPE MATHEMATICS OR ITS EQUIVALENT  
COURSE DESCRIPTION: This course uses the C language as a tool to teach fundamental programming concepts. The main concepts covered are sequence selection and repetition logic, character and string manipulation, functions, arrays and their applications.  
COURSE CONTENT: Steps in solving a problem: Problem solving steps to solve a problem that has an algorithmic solution; Structured and unstructured approaches to solving problems. Elementary Programming Concepts: Concept of a program; Assemblers, interpreters and compilers; Number representation in computers. C Basics: Fundamental concepts for solving problems on computers; Basic data types of variables and constants. Sequence Logic: Data collection - Reading from the keyboard; Processing- Assignment of variables; Calculations; Operators and logic. Output: Displaying data on the screen. Selection Logic: If construct; If…else construct; Nested if. Repetition Logic: While construct; For construct; Scope of variables. Working with Text Files: Data formats for text files; Reading; Writing. Functions: Modularization in program design; Function headers; How to return a value. Arrays: Declaring one-dimensional arrays; Finding largest and smallest values.  
Assessment: Coursework 40%  
(2 Assignments: to develop computer programs: 15% and 2 Examinations: 25%)  
Final Examination - One 2-hour written paper 60%  

LEVEL: I  
SEMESTER: I  
COURSE CODE: COMP 1401  
COURSE TITLE: INTRODUCTION TO COMPUTER SCIENCE CONCEPTS I  
NUMBER OF CREDITS: 3  
PREREQUISITE: TWO UNITS OF CAPE MATHEMATICS OR ITS EQUIVALENT  
COURSE DESCRIPTION: This course presents an overview of computing technology and the field of computer science. Discussion topics will include the organization of modern computers, operating systems, algorithms, programming languages and database systems.  
COURSE CONTENT: Data Storage: Gates: AND, OR, NOT, NAND; 1-bit memory, flip-flop; Main memory organization; storage hierarchy; Data representation: characters, integers, floating-point numbers. Data Manipulation: CPU, registers, instruction execution cycle, instruction set; Stored program concept, program execution; Performance enhancements: cache, pipelining; I/O modules. Operating System Fundamentals: Management of resources; Scheduling - process, process table, swapping; Memory management - partitions, demand paging, virtual memory. Algorithms: Iterative and recursive structures; efficiency and correctness. Programming Languages: Program translation; programming paradigms; Procedural, Object-oriented and declarative programming. Database Structures: Database issues; The relational model, relational operations - select, join, project.  
Assessment: Coursework 40%  
(2 Assignments: 10% each and 2 Examinations: 10% each)  
Final Examination - One 2-hour written paper 60%
LEVEL: I
SEMESTER: I
COURSE CODE: COMP 1402
COURSE TITLE: COMPUTER SCIENCE MATHEMATICS I
NUMBER OF CREDITS: 3
PREREQUISITE: TWO UNITS OF CAPE MATHEMATICS OR ITS EQUIVALENT
COURSE DESCRIPTION: This course provides students with the mathematical tools for problem solving. Students are taught to develop solutions for problems by mathematical Modelling using fundamental mathematical methods. Finally students are taught to implement solutions using mathematical software.
COURSE CONTENT: Logic: Propositions; Logical equivalence; Truth Tables; Simplified Logic. Proof Methods: Direct Method; Contradiction; Contra positive; Induction (Storage and Weak); Recursive Equations. Set Theory: Definitions; Intersections, Unions, Complements, Universal Sets, Set Difference, Symmetric Difference, Equivalence, Venn Diagrams; Set Algebra; Set Proofs (With and Without Set Algebra). Functions and Relations: Definitions; Reflexive, Symmetric, Transitive Relations; Closure; Examples of Relations; One to one and Onto and Invertible Functions. Mathematical Software: Design and Write Programs to demonstrate all of the above topics (Note: Using Symbolic Packages).
Assessment:
Coursework 40%
(6 Assignments: 22% and 6 Quizzes: 6% and 2 Examinations: 12%)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: I
COURSE CODE: COMP 1403
COURSE TITLE: INTRODUCTION TO WEB PROGRAMMING
NUMBER OF CREDITS: 3
PREREQUISITE: TWO UNITS OF CAPE MATHEMATICS OR ITS EQUIVALENT
COURSE DESCRIPTION: This is an introduction to web technologies and systems, including hypertext, self-descriptive text, web page design, web navigational systems, and various mark-up languages and scripting languages. Programming examples, exercises and projects are drawn from practical web-based applications. Good programming practice and program clarity is emphasized throughout the course.
COURSE CONTENT: HTTP Protocol .Presentation abstractions .Web-markup and display languages. Cascading Style Sheets. Introduction to a scripting language - User input, arithmetic, equality and relational logical and operators; Control statements; Functions, arrays, objects. Dynamic HTML.
Assessment:
Coursework 40%
(2 Assignments: 16% and Lab Practical Test: 8% and Written Examination: 16% each)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: 2
COURSE CODE: COMP 1404
COURSE TITLE: PROGRAMMING II
NUMBER OF CREDITS: 3
PREREQUISITE: COMP 1400
COURSE DESCRIPTION: This course uses the C language as a tool to teach intermediate programming concepts. The main concepts covered are structures, one and two dimensional arrays and applications involving their searching, sorting and merging, random number generation, numerical methods, games and simulation.
COURSE CONTENT: Structures: Declaration; User defined types; Arrays of structures; Nested structures. Characters and Strings: Character representation in computers; Reading and writing characters to and from files; String operations. Sorting, Searching and Merging: Sorting arrays; Inserting elements in place; Sorting parallel arrays; Binary search; Merging ordered lists. Random Numbers: Random and pseudo random numbers; Random number generation and ranges. Games and Simulation. Numerical Methods.
Assessment:
Coursework 40%
(2 Assignments: 15% and 2 Examination: 25% each)
Final Examination - One 2-hour written paper 60%
LEVEL: I
SEMESTER: 2
COURSE CODE: COMP 1405
COURSE TITLE: PROGRAMMING III
NUMBER OF CREDITS: 3
PREREQUISITE: COMP 1400

COURSE DESCRIPTION: This course uses the C language as a tool to teach intermediate programming concepts. The main concepts covered are pointers, linked lists, stacks and queues and their implementations using arrays and linked lists and recursion. This course requires an understanding of basic programming concepts such as variables, assignment, selection and looping constructs as well as being comfortable with working with character, strings and arrays.

COURSE CONTENT:
Pointers: Concept of a pointer; Pointers as arguments; Pointer arithmetic.
Linked Lists: Operations of a linked list – Counting, Searching, Getting last node; Allocating space - malloc, calloc, sizeof, free; Adding; Deleting; Sorted lists; Merging.
Abstract Data Types: Stacks - Array implementation; Linked list implementation; Queues - Array implementation; Linked list implementation. Recursion: Recursive functions; Recursive applications.
Files: Reading data from a file; Sending output to a file; Text file vs binary files; Opening and closing files; Binary files; Random access files; Indexed files.

Assessment:
Coursework 40%
(2 Assignments: 15% and 2 Examinations: 25% each)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: 2
COURSE CODE: COMP 1406
COURSE TITLE: COMPUTER SCIENCE MATHEMATICS II
NUMBER OF CREDITS: 3
PREREQUISITE: COMP 1402

COURSE DESCRIPTION: This course provides students with an introduction to number theory, counting, probability, matrices and limits. Students are taught to analyze and develop solutions for solving problems using the topics listed above. Finally students are taught to implement solutions using mathematical software.

COURSE CONTENT:
Introduction to Number Theory: Modulo Arithmetic; Division Algorithm; Greatest Common Divisor; Least Common Multiple; Prime Factorization; Solving Linear Diophantine Equations. Counting and Probability: Definitions; Introduction to Discrete Probability; Bayes’ Theorem; Permutations; Combination s; Pigeon Hole Principle. Matrices: Matrix Algebra; Determinants; Row Operations; Gaussian Elimination; Inverse; Solutions of Systems of Linear Equations. Series: Divergent and Convergent Sequences; Recursive Sequences; Order of Sequences; Series Definition; Convergent and Divergent Series. Limits: Definition; Indeterminate Forms; Epsilon - Delta Definitions; Continuity and Differentiability. Mathematical Software: Design and Write Programs to demonstrate all of the above topics. (Note: Using Symbolic Packages).

Assessment:
Coursework 40%
(6 Assignments: 22% and 6 Quizzes: 6% and 2 Examinations: 12%)
Final Examination - One 2-hour written paper 60%
LEVEL: I
SEMESTER: 2
COURSE CODE: COMP 1407
COURSE TITLE: INTRODUCTION TO COMPUTER SCIENCE CONCEPTS II
NUMBER OF CREDITS: 3
PREREQUISITE: COMP 1401
COURSE DESCRIPTION: This course presents an overview of some key areas of computing technology and the field of computer science. Discussion topics will include Networking and the Internet, Software Engineering, Data Abstractions, Computer Graphics, Artificial Intelligence and Theory of Computation.
COURSE CONTENT: Networking and the Internet: Network Fundamentals; The Internet; The World Wide Web; Internet Protocols; Security. Software Engineering: The Software Engineering Discipline; The Software Life Cycle; Software Engineering Methodologies; Modularity; Tools of the Trade; Quality Assurance; Documentation; The Human-Machine Interface; Software Ownership and Liability. Data Abstractions: Basic Data Structures; Related Concepts: Implementing Data Structures; A Short Case Study; Customized Data Types; Classes and Objects; Pointers in Machine Language. Computer Graphics: The Scope of Computer Graphics; Overview of 3D Graphics; Modelling; Rendering; Dealing with Global Lighting; Animation. Artificial Intelligence: Intelligence and Machines; Perception; Reasoning; Additional Areas of Research; Artificial Neural Networks; Robotics; Considering the Consequences. Theory of Computation: Functions and Their Computation; Turing Machines; Universal Programming Languages; A Noncomputable Function; Complexity of Problems; Public-Key Cryptography.
Assessment:
Coursework 40%
(2 Assignments: 10% each and 2 Examinations: 10% each)
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTER: 1
COURSE CODE: COMP 2000
COURSE TITLE: DATA STRUCTURES
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 1100 AND COMP 1200 OR COMP 1404 AND COMP 1405
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTER: 2
COURSE CODE: COMP 2100
COURSE TITLE: DISCRETE MATHEMATICS FOR COMPUTER SCIENCE
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR COMP 1300 OR COMP 1402 AND COMP 1406
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%
LEVEL: II
SEMESTER: 1
COURSE CODE: COMP 2200
COURSE TITLE: COMPUTER ARCHITECTURE
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 1100 AND COMP 1200 OR COMP 1404 AND COMP 1405
COURSE DESCRIPTION: Computer functions; Memory caching, Internal Memory; Input/output devices and operation; Computer arithmetic; Instruction sets; Reduced instruction set computers; Control unit operation; Micro programmed control.
Assessment:
Coursework 40%
Final Examination-One 2-hour written paper 60%

LEVEL: II
SEMESTER: 2
COURSE CODE: COMP 2300
COURSE TITLE: PROGRAMMING FOR BUSINESS APPLICATIONS
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 1100 AND COMP 1200
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 2400
COURSE TITLE: INFORMATION SYSTEMS
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 1100 AND COMP 1200 OR COMP 1401 AND EITHER COMP 1404 OR COMP 1405
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%
LEVEL: II  
SEMESTER: 2  
COURSE CODE: COMP 2500  
COURSE TITLE: OBJECT-ORIENTED PROGRAMMING  
NUMBER OF CREDITS: 4  
PREREQUISITES: COMP 1100 AND COMP 1200 OR COMP 1404 AND COMP 1405  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: II  
SEMESTER: NOT OFFERED IN 2012/2013  
COURSE CODE: COMP 2600  
COURSE TITLE: THEORY OF COMPUTING I  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 1140 OR COMP 1300  
COURSE DESCRIPTION: Strings and Languages and Induction. Finite Automata and Regular Languages. Context-free Languages. Computability; Turing machine.  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: II  
SEMESTER: 1  
COURSE CODE: COMP 2700  
COURSE TITLE: DATABASE MANAGEMENT SYSTEMS I  
NUMBER OF CREDITS: 4  
PREREQUISITES: COMP 1100 AND COMP 1200 OR COMP 1401 AND EITHER COMP 1404 OR COMP 1405  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: III  
SEMESTER: 2  
COURSE CODE: COMP 3000  
COURSE TITLE: DESIGN AND ANALYSIS OF ALGORITHMS  
NUMBER OF CREDITS: 4  
PREREQUISITE: COMP 2000  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%
LEVEL: III  
SEMESTER: 1  
COURSE CODE: COMP 3100  
COURSE TITLE: OPERATING SYSTEMS  
NUMBER OF CREDITS: 4  
PREREQUISITE: COMP 2200  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: III  
SEMESTER: 1  
COURSE CODE: COMP 3150  
COURSE TITLE: COMPUTER NETWORKS  
NUMBER OF CREDITS: 4  
PREREQUISITE: COMP 2500  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: III  
SEMESTER: 2  
COURSE CODE: COMP 3220  
COURSE TITLE: HUMAN-COMPUTER INTERACTION  
NUMBER OF CREDITS: 4  
PREREQUISITE: COMP 1200  
Assessment:  
Coursework 60%  
Final Examination - One 2-hour written paper 40%
LEVEL: III
SEMESTER: 2
COURSE CODE: COMP 3250
COURSE TITLE: SOFTWARE ENGINEERING
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2000
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3275
COURSE TITLE: WIRELESS & MOBILE COMPUTING
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 3150
COURSE DESCRIPTION: Introduction to the ISO and other network architectures, History and Evolution of wireless standards, Special problems of wireless and mobile computing, Wireless Local loops, Mobile Internet Protocol, Mobile aware adaptation, Mobile client/server networks, Mobile data access, Software support for mobile and wireless computing (includes MIDP programming, SMS and Bluetooth based applications), Wireless Local loops, Mobile Internet Protocol, Application aware and application transparent adaptation, Mobile data address, The role of middleware, Performance Issues, Emerging Technologies.
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3300
COURSE TITLE: PROGRAMMING LANGUAGES I
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2000
COURSE DESCRIPTION: This course will focus on two programming paradigms: imperative and logic. For the imperative paradigm, the programming language C (or any other language representative of this paradigm) will be used. For the logic programming paradigm, the programming language Prolog (or any other language representative of this paradigm) will be used.
The Imperative Programming Paradigm: Basic types, Expressions and statements, Functions/procedures and programme structure, Arrays, pointers, Structures/records, Structures input/output, File input/output.
The Logic Programming Paradigm: Motivation and introduction, Knowledge bases, unification and variable instantiation, backtracking, relations, conjoined goals, disjoint goals, negative goals, equality testing, Structures and operators, Input/output, Problem-solving strategies.
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3400
COURSE TITLE: ARTIFICIAL INTELLIGENCE
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2000
COURSE DESCRIPTION: The concept of problem solving as search through a state space, Basic search algorithms, Depth-first, breadth-first, best-first, hill-climbing, branch-and-bound, A*. Mini-max algorithm with alpha-beta pruning, Logic and theorem proving, Propositional logic, First order predicate logic, Unification, Clausal form, Resolution theorem proving, Natural language processing, Parsing expressions, Semantic transition trees, Planning, Basic goal regression using STRIPS type actions, Production rule systems, Basic concepts, An expert system shell.
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%
LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3500
COURSE TITLE: INTERNET TECHNOLOGIES I
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2500
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3550
COURSE TITLE: INTERNET TECHNOLOGIES II
NUMBER OF CREDITS: 4
PREREQUISITE: COMP2500 OR COMP 3500
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3600
COURSE TITLE: THEORY OF COMPUTING II
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2100
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 2
COURSE CODE: COMP 3700
COURSE TITLE: DATABASE MANAGEMENT SYSTEMS II
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2700
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3750
COURSE TITLE: NUMERICAL COMPUTING
NUMBER OF CREDITS: 4
PREREQUISITE: COMP2100
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%
LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3800
COURSE TITLE: CRYPTOGRAPHY AND SECURITY
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2100
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3850
COURSE TITLE: INTELLIGENT SYSTEMS
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2000
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: COMP 3900
COURSE TITLE: SPECIAL TOPICS IN COMPUTER SCIENCE (GAME PROGRAMMING)
NUMBER OF CREDITS: 4
PREREQUISITES: COMP 2000 AND COMP 2500
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 1
COURSE CODE: COMP 3950
COURSE TITLE: MODELLING AND SIMULATION
NUMBER OF CREDITS: 4
PREREQUISITE: COMP 2100
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 1
COURSE CODE: COMP 3990
COURSE TITLE: PROJECT
NUMBER OF CREDITS: 4
PREREQUISITES: COMP2500 AND COMP3250
COURSE DESCRIPTION: Assessing project feasibility; Methods of investigation; Project reporting and presentation; Project management. Select and implement an appropriate project on some topic in Computer Science. This may include design and implementation of a computer application.
Assessment:
Project report 80%
Oral presentation 20%
(No final written examination)

LEVEL: I
SEMESTER: 1
COURSE CODE: ECON 1001
COURSE TITLE: INTRODUCTION TO ECONOMICS I
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
DEPARTMENT RESPONSIBLE: ECONOMICS
COURSE DESCRIPTION: This course provides students to the history of economic thought highlighting some of the key economic issues, which have preoccupied the discipline from its origins. The course also provides an introduction to the basic principles of micro-economic analysis together with the main perspectives on the functioning of the macro-economy. The micro-economic analysis is illustrated by reference to a key export sector in the Caribbean (e.g. oil or bananas). The implications of trends in the latter for the Balance of Payments and macro economy conclude this first semester course.
LEVEL: I
SEMESTER: 2
COURSE CODE: ECON 1002
COURSE TITLE: INTRODUCTION TO ECONOMICS II
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
CO-REQUISITE: ECON 1001
DEPARTMENT RESPONSIBLE: ECONOMICS
COURSE DESCRIPTION: This course emphasises macroeconomic theory and policy and the related national income accounting together with international trade and the balance of payments. There is a significant stress on the implications of these economic issues for the Caribbean reality.

LEVEL: I
SEMESTER:
COURSE CODE: ECON 1005
COURSE TITLE: INTRODUCTION TO STATISTICS
NUMBER OF CREDITS: 3
PREREQUISITES:
DEPARTMENT RESPONSIBLE: ECONOMICS
COURSE DESCRIPTION: Descriptive Statistics; Probability and Probability distributions, Sampling distributions, Estimation, Hypothesis testing, simple correlation and regression.

LEVEL: I
SEMESTERS: 1 & 2
COURSE CODE: FOUN 1101
COURSE TITLE: CARIBBEAN CIVILISATION
NUMBER OF CREDITS: 3
PREREQUISITES:
COURSE DESCRIPTION: (NOT for Humanities students)
Objectives:
1. To develop an awareness of the main process of cultural development in Caribbean societies, highlighting the factors, the problematics and the creative output that have fed the emergence of Caribbean identities.
2. To develop a perception of the Caribbean as wider than island nations or linguistic blocs.
3. To stimulate studentsí interest in, and commitment to Caribbean civilisation and to further their self-definition.

Modules:
1. Origins
   I Caribbean space / physical environment / Amerindian peoples and Cultures: their legacy.
   II European conquest, settlement and demographic changes.
2. Fighting for Freedom
   I Slavery, marronage and rebellion.
   II New in/out- migration, indenture, and their consequences: 19th and 20th centuries.
3. Quest for Identity
   I Race and nationalism.
   II Independence, dependence and regionalism.
   III Creolisation and ethnic identity.
4. Ideas, Ideologies and Theologies
   I Education/religion in the Caribbean.
   II Caribbean Intellectual Traditions.
5. Caribbean Expressions
   I Caribbean music - Calypso, Reggae.
   II Caribbean festivals.
   III Sports.
   IV Caribbean voices - French, English, Spanish, Linguistic Identity.
Evaluation:
In-course test  40%
Final 2-hour examination  60%
LEVEL: I
SEMESTER: 2
COURSE CODE: FOUN 1102
COURSE TITLE: ACADEMIC WRITING FOR DIFFERENT DISCIPLINES (OPTION C)
NUMBER OF CREDITS: 3
PREREQUISITES:
Any one of the following:
- CSEC English Language Grade I (General Proficiency) Grade I or II in CAPE Communication Studies
- General Paper Grade A or B
- A Pass in the English Language Proficiency Test
- A Pass in English as a Foreign Language (Intermediate)
COURSE DESCRIPTION: The aim of this course is to develop students writing skills in areas related to their academic disciplines. There will be twenty-four (24) contact hours. Classroom activity will be supplemented by printed materials.
Option C
Scientific and Technical Writing (Compulsory for FST Students)
Technical Description
Expository Writing for Scientific and Technical Purposes
EVALUATION:
Coursework 50%
Final Examination 50%

Students must pass both coursework and final examination in order to qualify for an overall pass in the course.

ATTENDANCE REGULATION:
A student in any of the Foundation courses in English Language who misses two (2) out of any six (6) class hours will be warned, and after two warnings any further absence without prior permission or an acceptable medical certificate will result in automatic exclusion from the examination.

FOUN 1210 Not offered to FST Students.
LEVEL: I
SEMESTER: I AND EVENING UNIVERSITY - SEMESTER I
COURSE CODE: INFO 1500
COURSE TITLE: INTRODUCTION TO INFORMATION TECHNOLOGY FUNDAMENTALS
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: This course provides an overview of the discipline of IT. It describes how it relates to other computing disciplines. The goal is to help students understand the diverse contexts in which IT is used and the challenges inherent in the diffusion of innovative technology.
COURSE CONTENT: Information Technology - Basics: Overview of the history of IT; Impact of IT on business and society; Stages of Data Processing in an organization (input, processing, output); Difference between Data and Information; Characteristics of valuable information; Information and Management Decision Making; Information Systems: classifications and examples. Pervasive Themes in IT: User Centeredness; Information Assurance and Security; IT Systems Model; Management and Complexity; Organizational Issues; Information and Communication Technologies; Emerging Computing Environments. Technical Foundations of Information Systems: Computers and Information Processing; Hardware Components associated with Information Systems; Information Systems Software; Managing Data Resources; Telecommunications and Networks; The Internet: Electronic Commerce and Electronic Business. IT Ethics, Impact and Security: Ethical Issues; Impact of IT on organizations and jobs; Impact of IT on individuals at work; Impact of IT on society and internet communities; Vulnerability of Information Systems and computer crimes; Protecting Information Resources.IT and its Related and Informing Disciplines Computer Science; Software Engineering; Database Systems; Computer Architecture; Human-Computer Interaction; Other disciplines. Application Domains: Bio-informatics, Medicine, Business, Law Enforcement, Education, Entertainment, Agriculture, etc.
Assessment:
Coursework  40%
(3 Assignments: 20% and Two 1-hour Examinations: 20%)
Final Examination - One 2-hour written paper  60%

LEVEL: I
SEMESTER: I AND EVENING UNIVERSITY - SEMESTER I
COURSE CODE: INFO 1501
COURSE TITLE: INTRODUCTION TO WWW PROGRAMMING
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: This is an introduction to web technologies and systems, including hypertext, self-descriptive text, web page design, web navigational systems, and various mark-up languages and scripting languages. Programming examples, exercises and projects are drawn from practical web-based applications. Good programming practice and program clarity is emphasized throughout the course.
COURSE CONTENT: HTTP Protocol. Presentation abstractions .Web-mark-up and display languages. Cascading Style Sheets. Introduction to a scripting language -User input, arithmetic, equality and relational logical and operators, Control statements ,Functions, arrays, objects. Dynamic HTML
Assessment:
Attendance and Participation  10%
5 Lab Examinations  10% each
Project  40%
(NO FINAL WRITTEN EXAMINATION)
LEVEL: I
SEMESTER: I AND EVENING UNIVERSITY - SEMESTERS I & 3
COURSE CODE: INFO 1502
COURSE TITLE: INTRODUCTION TO PROBLEM SOLVING
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: This course provides mostly a non-language specific introduction to problem-solving and computer programming. Topics include: structured problem-solving, structured program design, control (logic) structures, working with arrays and data files, and an overview of data management and object-oriented programming. Students will be exposed to a variety of tools and methods that are useful in all aspects of developing software applications and writing program code. There is a small hands-on java (or other language of choice) component of the course with the bulk of the course focusing instead on designing program logic.

COURSE CONTENT: Six Steps in Problem Solving: Describe the difference between unstructured and structured solutions to problems. List and describe the six problem solving steps to solve a problem that has an algorithmic solution. Problem Solving and Programming Structure (Flowcharting preferred): Develop programs for the computer using the program developmental tools. Use the sequential logic structure to solve a problem. Use the decision structure to solve a problem. Use the repetition structure to solve a problem. Develop a case-driven solution for a problem. Fundamental Concepts for Solving Problems on Computers: Explain the fundamental concepts for solving problems on computers. Differentiate between the basic data types of variables and constants. Describe what a program is. Distinguish between an assembler, interpreter and compiler. Data Storage and Organization: Describe how data is stored and organized. Differentiate between fields, records and files. Describe the importance of internal and external documentation. Arrays: Develop problem solutions for the computer using one-dimensional and two-dimensional arrays. Apply various sorting techniques to arrays. Perform a linear search of an array. Perform a binary search of an array. Programs Using Modules and Local/Global Variables: Explain the advantages of modularization in program design. Identify the components of a programmer defined method. Use value-returning and non-value returning methods in a programming problem. Design a hierarchy chart. Explain the differences between global and local variables.

Assessment:
Coursework 40%
(3 Assignments: 20% and
Two 1-hour Examinations: 20%)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: I AND EVENING UNIVERSITY - SEMESTER 3
COURSE CODE: INFO 1503
COURSE TITLE: INTRODUCTION TO MATHEMATICS FOR CRITICAL THINKING
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: This course provides students with the mathematical tools for problem solving. Students are taught to develop solutions for problems by mathematical Modelling using fundamental mathematical methods.


Assessment:
Coursework 40%
(6 Assignments: 20% and
Two 1-hour Examinations: 20%)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTERS 2 & 3
COURSE CODE: INFO 1504
COURSE TITLE: INTRODUCTION TO PROGRAMMING FUNDAMENTALS I
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: Programming fundamentals develops skills and concepts that are essential to good programming practice and problem solving. The course introduces students to the basics of programming, including programming constructs, basic data structures, and arrays. Throughout the course these concepts are applied to the solution of simple business type problems.


Assessment:
Coursework 40%
(4 Assignments: 20% and
Two 1-hour Examinations: 20%)
Final Examination - One 2-hour written paper 60%
LEVEL: I
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTER 2
COURSE CODE: INFO 1505
COURSE TITLE: INTRODUCTION TO COMPUTER SYSTEMS
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: The course introduces the student to the basics of hardware, storage and system software. It covers the relationship between different parts of a computer system and how they work together to get a job completed. Additionally it gives the student an appreciation for data organization techniques and their applicability to real world scenarios.
COURSE CONTENT: Information Systems: Define data and information. Identify the qualities of information. Differentiate between fields, records and files. Explain the basic components of an IT system and its capabilities. Inside the computer system: Explain how data is represented and stored in a computer system. (Numbering systems, 1’s and 2’s complement, floating point representation). Identify and explain the function of the internal components of a computer system. Discuss the relationship between the components of a computer system and how to interact to get a task done. Discuss the computer operations (input, processing, output and storage). Discuss different approaches to processor design and their appropriateness of use. Input and Output of information: Analyze input requirements of a system. Discuss the common methods of input collection, masking. Identify common input validation techniques. Identify common modes of processing information. Analyze the output requirements of a system. Identify common output validation techniques. Data Storage and Organization: Describe the various types of storage devices and media in each of the areas outlined. Organization of data. Principles of operation. Performance. Suitable applications. Describe methods and procedures for backing up files. Software: Identify and differentiate between the types of software. List the function and used of common software suite applications. Operating Systems: Explain the purpose of an operating system. Identify the common Interface types of operating systems giving examples. Identify components common to all operating systems and explain the purpose of each. List common operating system platforms. Navigate two common operating system platforms to get basic information about a system.
Assessment:
Coursework 40%
(3 Assignments: 20% and Two 1-hour Examinations: 20%)
Final Examination - One 2-hour written paper 60%

LEVEL: I
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTER 2
COURSE CODE: INFO 1506
COURSE TITLE: INTRODUCTION TO INFORMATION AND DATA MANAGEMENT
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: Data Management is the process of organizing data from the resource perspective. It introduces students to spreadsheets and databases. This course looks at databases from a user perspective rather than a design perspective to give an appreciation for its place in the Information Technology area. The spreadsheets will be presented with the purpose of students being able to create models required by the working environment.
COURSE CONTENT: Data Management Principles: Data Quality; Data Cleaning; Data as an Asset; Sharing of Data and Accessibility of Data; Fitness of Data; Law and Regulation Compliance; Security of Data; Data Definition; Duplication and Copy control. Data Integration and Interoperation: Data Processing Programs; Data Management systems. Databases: Role of a Database; Database Structure (Fields, Rows, Tables); Types of Databases. Spreadsheets: Role of a Spreadsheet; Differences between Spreadsheets and Databases; Databases and Spreadsheets – the need for integration in solutions; Role of Excel as a Flat File Database; Excel Architecture Overview. Financial Modelling: Modelling concepts; Variables; Relationships; Input, processing and output; Layout Issues; Excel Object Hierarchy; Object properties and Methods; Excel events; Visual Basic Overview. Introduction to Financial Modelling in Excel: GUI and Code access types; Overview of code; Objects and collections in Excel; Worksheet and User Forms. Advanced Excel Concepts 1: Excel arrays; Functions; Naming Scheme; Formatting Scheme; Data Validation; Excel Controls; Data Management features in Excel; Pivot Tables; What-if analysis; Report Manager; Data from the Internet. Advanced Excel Concepts 2: Excel Programming Introduction; Excel Object Hierarchy; Excel Event Procedures; Excel Macro Recorder; Writing Visual Basic Code; Decision Structures in Visual Basic; Visual Basic Controls; Functions in Visual Basic.
Assessment:
Coursework 40%
(4 Assignments: 24%; One 1-hour practical Examination: 8% and One 1-hour written Examination 8%)
Final Examination - One 2-hour written paper 60%
LEVEL: I
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTER 3
COURSE CODE: INFO 1507
COURSE TITLE: INTRODUCTION TO BUSINESS PRINCIPLES
NUMBER OF CREDITS: 3
PREREQUISITE: NONE
COURSE DESCRIPTION: This course gives an introduction to economics, managerial accounting and project management. Additionally, it gives the student a grasp of the role each of these areas perform and an appreciation as to why they are critical to any organization.

COURSE CONTENT: Economics Theory: Introduction to Basic Economic Concepts; Economic Valuation; Micro and Macro economics; Economics Planning and Control; Resource allocation; Budgeting. Costing and Finance: Marginal or Direct Costing; Depreciation; Overheads; Stock Evaluation; Product Costs; Labour Costs. Management Accounting: Basic accounting concepts and practices; Reporting results; Differentiating between budgets and forecasts; Profit and loss. Principles of Management: Overview of basic management principals; Planning; Organizing; Leadership; Motivation; Communication. Project Management Basics: Defining the project; Project life cycle; Role of the project manager. Managing a Project: Scope; Work breakdown structure; Network analysis; Budgeting and scheduling; GNATT chart; Critical path method. Organizing - Work breakdown structure; Responsibility; Responsibility assignment matrix; Team building. Leading - Shared vision; Managing reward; Motivation; Managing conflict. Control - Project control system; Project monitoring and evaluation; Reporting progress.

Assessment:
Coursework 40%
(2 Assignments: 20%,
1 Group Project: 10%
1 one-hour Examination: 10% each)
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTER 2
COURSE CODE: INFO 2400
COURSE TITLE: INFORMATION SYSTEMS DEVELOPMENT
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 1400 OR INFO 1500
COURSE DESCRIPTION: Systems development. Throughout the course, information is seen as a valuable corporate resource, one that can be used to maximize profit and improve competitiveness of a business organization. Consequently, the course takes an in-depth look at business processes and the ways in which they can be automated through an Information System. There is extensive coverage of the technical foundations of modern Information Systems as well as the process of developing and implementing a suitable Information System for an organization. The development of web-based information systems is also covered.


Assessment:
Coursework 40%
(3 Assignments: 30% and
1 one-hour Written Examination: 10%)
Final Examination - One 2-hour written paper 60%
LEVEL: II
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTERS 2 AND 3
COURSE CODE: INFO 2405
COURSE TITLE: DISCRETE MATHEMATICS
NUMBER OF CREDITS: 4
PREREQUISITES: INFO 1415 AND INFO 1420 OR INFO 1503

COURSE DESCRIPTION: This course seeks to build formal mathematical competence required in many fields in Information Technology such as information security, cryptography and data structures. Students are exposed to formal logic and reasoning and use this to construct proofs and develop algorithms. The course also introduces various problem solving strategies especially thinking algorithmically both iterative and recursive. The course also motivates the need for discrete structures and techniques by introducing computer applications.

COURSE CONTENT:

Assessment:
Coursework 40%
(2 Assignments: 20% and 2 one-hour Examinations: 20%)
Final Examination - One 2-hour written paper 60%

LEVEL: II
Semester: 2 AND EVENING UNIVERSITY - SEMESTER 2
COURSE CODE: INFO 2410
COURSE TITLE: FUNDAMENTAL DATA STRUCTURES
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2420

COURSE DESCRIPTION: This course covers the major data structures used in programming. The properties of the various data structures are studied as well as their appropriate use for different applications. In-memory data structures as well as structures for file organizations are considered.

COURSE CONTENT:

Assessment:
Coursework 40%
(3 Assignments: 20% and 2 one-hour Written Examinations: 20%)
Final Examination - One 2-hour written paper 60%
LEVEL: II  
SEMESTER: 1 AND EVENING UNIVERSITY - SEMESTERS 1 AND 3  
COURSE CODE: INFO 2415  
COURSE TITLE: ENTERPRISE DATABASE SYSTEMS  
NUMBER OF CREDITS: 4  
PREREQUISITE: INFO 1400 AND INFO 1405 OR INFO 1506  
COURSE DESCRIPTION: The course covers the design, implementation and management of Database Systems. Emphasis is placed on database design of real world business applications using Entity-Relationship modeling. SQL programming is covered in detail. Query Optimization concepts are introduced in the context of database performance tuning. Data Management concepts such as Transaction Management, Concurrency Control, Recovery, and Security are discussed. Several current database environments and applications including Distributed Databases and Web-enabled Databases are discussed.  
COURSE CONTENT:  
Assessment:  
Coursework 40%  
(3 Assignments: 21%  
1 one-hour Written Examination: 10% and  
1 two-hours Practical Examination: 9%)  
Final Examination - One 2-hour written paper 60%  

LEVEL: II  
SEMESTER: 1 AND EVENING UNIVERSITY - SEMESTERS 1 AND 3  
COURSE CODE: INFO 2420  
COURSE TITLE: PROGRAMMING FUNDAMENTALS II  
NUMBER OF CREDITS: 4  
PREREQUISITE: INFO 1420 OR INFO 1504  
COURSE DESCRIPTION: The course introduces simple data structures that every novice programmer should become familiar with. It introduces the concept of Abstract Data Types, their characteristics and implementation, such as Linked list, stacks and queues.  
Assessment:  
Coursework 40%  
(4 Assignments: 20% and  
2 one-hour Examinations: 20%)  
Final Examination - One 2-hour written paper 60%
LEVEL: II  
SEMESTER: 1 AND 3  
COURSE CODE: INFO 2425  
COURSE TITLE: COMPUTER ARCHITECTURE  
NUMBER OF CREDITS: 4  
PREREQUISITE: INFO 1415 AND INFO 1420 OR INFO 1503 AND INFO 1504  
COURSE DESCRIPTION:  This course covers the fundamentals of the operation and design of computers from the programmer's and architect's point of view. It describes the components of a computer, functions of each component, and how components interact with each other and with software.  
Assessment:  
Coursework 40%  
(2 Assignments: 20% and 2 one-hour Examinations: 20%)  
Final Examination - One 2-hour written paper 60%  

LEVEL: II  
SEMESTER: 1 AND 3  
COURSE CODE: INFO 2430  
COURSE TITLE: BUSINESS INFORMATION SYSTEMS  
NUMBER OF CREDITS: 4  
PREREQUISITE: INFO 1400 AND INFO 1405 OR INFO 1506 AND INFO 1507  
COURSE DESCRIPTION:  The course focuses on Information Systems in terms of business processes. It covers transaction cycles, events, and activities of Revenue, Expenditure, Production, and Human Resources business processes. The course covers core application frameworks – customer relationship management, enterprise resource planning, revenue and expenditure management, and human resource management – with emphasis on modeling of business processes and data. The material is covered from the perspective of business in Trinidad & Tobago. E-Business concepts and principles are introduced.  
Assessment:  
Coursework 40%  
(3 Assignments: 24%  
1 one-hour Written Examination: 8% and 1 two-hours Practical Examination: 8%)  
Final Examination - One 2-hour written paper 60%
LEVEL: II
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: INFO 2500
COURSE TITLE: NETWORKING TECHNOLOGIES
FUNDAMENTALS
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 1500 AND INFO 1505
COURSE DESCRIPTION: The course introduces the student to the world of computer networks. Principles and protocols for data communication are covered. Network architecture models are visited and students get exposure to the practical aspects of networking e.g. setting up a basic network, router configuration, crimping of cables.

COURSE CONTENT: Foundation of Networking: What is the Internet? The Network Edge; The Network Core; Delay and Loss; Protocol layers and their service models. Application Layer: Principles of Network Applications; Applications: FTP, Email, DNS. Transport Layer: Introduction to Transport-Layer services; Multiplexing and demultiplexing; UDP. Principles of Reliable Data Transfer; TCP; Congestion Control. Network Layer: Introduction; Virtual Circuit and Datagram Networks; Inside a Router; The Internet Protocol (IP); Introduction to Routing Algorithms. The Link Layer and Local Area Networks: Link Layer Services; Multiple Access Protocols; Link Layer Addressing; Ethernet; PPP. Wireless and Mobile Networks: Introduction; Wireless Links and Network Characteristics; WiFi: 802.11 Wireless LANS; Cellular Internet Access; Mobility Management. Network Design: Network Design Process; Network Design Examples. Practical Networking: Crimping; Configuration of Routers; Knoppix networking; Subnetting; Wireless Network Configuration; Network Troubleshooting; Network Management. Network Security.

Assessment:
Coursework 40%
(3 Assignments: 20%,
1 one-hour written Examination: 10%)
1 two-hour Practical Examination: 10%)
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: I AND EVENING UNIVERSITY-SEMESTER 1
COURSE CODE: INFO 3400
COURSE TITLE: FUNDAMENTALS OF OPERATING SYSTEMS
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2425
COURSE DESCRIPTION: This course provides the student with an introductory understanding of the role and functioning of an operating system. The basic algorithms used to manage processes, memory and disk devices will be presented.


Assessment:
Coursework 40%
(2 Assignments: 20% and
2 one-hour Examination: 20%)
Final Examination - One 2-hour written paper 60%
LEVEL: III
SEMESTER: I AND EVENING UNIVERSITY - SEMESTER 1
(LAST OFFERING 2012/2013)
COURSE CODE: INFO 3405
COURSE TITLE: NETWORKING TECHNOLOGIES
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2425
Assessment:
Coursework (test/assignments)  40%
Final Examination - One 2-hour written paper  60%

LEVEL: III
SEMESTER: 2 AND
EVENING UNIVERSITY - SEMESTERS: 2 AND 3
COURSE CODE: INFO 3410
COURSE TITLE: WEB SYSTEMS AND TECHNOLOGIES
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2420
COURSE DESCRIPTION: This course covers the design, implementation and testing of web-based applications and social software, and the incorporation of a variety of digital media into these applications. Students are exposed to a range of web technologies, both client-side and server-side.
Assessment:
Coursework 40%
(3 Assignments: 18% and
1 Project:  22%)
Final Examination - One 2-hour written paper  60%
LEVEL: III
SEMESTER: 2
COURSE CODE: INFO 3420
COURSE TITLE: PROGRAMMING LANGUAGES
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2420 OR COMP2500
COURSE DESCRIPTION: The aim of this course is to provide a conceptual framework that will enable students to understand already-learned programming languages more deeply and to learn new languages effectively as they will require skills in adopting new programming languages. Students will gain an understanding of the fundamental concepts and design issues of programming languages and become familiar with the major programming paradigms.
Assessment:
Coursework 40%
(3 Assignments: 24% and
1 one-hour Examination: 16%)
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: EVENING UNIVERSITY - SEMESTER 3
COURSE CODE: INFO 3425
COURSE TITLE: PROFESSIONAL ETHICS AND LAW
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2400
COURSE DESCRIPTION: This course provides an overview of current ethical standards and practices in the computing and information technology area. Students will develop an awareness of both the ethical and legal issues facing the computerized workplace. The course also introduces the student to policy development in computer technology related environments.
Assessment:
Coursework 40%
(2 Assignments: 20%
1 one-hour Examination: 10% and
1 Project (case study): 11%)
Final Examination - One 2-hour written paper 60%
LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: INFO 3430
COURSE TITLE: INTRODUCTION TO SCIENTIFIC COMPUTING
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2405 AND INFO 2420
COURSE DESCRIPTION: This course provides a broad overview of numerical methods for students in computationally oriented disciplines who need to solve mathematical problems that arise in many fields, especially science and engineering. It focuses on the motivation and ideas behind the numerical algorithms and on the use of professionally written mathematical software for obtaining solutions whenever possible.
Assessment:
Coursework 40%
(3 Assignments: 24% and 1 one-hour Examination: 16%)
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 1 AND EVENING UNIVERSITY - SEMESTER 3
COURSE CODE: INFO 3440
COURSE TITLE: SOFTWARE ENGINEERING
NUMBER OF CREDITS: 4
PREREQUISITES: INFO 2400 AND INFO 2420
COURSE DESCRIPTION: This course introduces students to the fundamental concepts and techniques of software engineering. It examines various approaches for developing a software product, from the initial request for development right down to the delivery of the final product to the customer. All of these approaches involve steps such as determining the user requirements, structuring these requirements in the form of a requirements specification document, and designing, coding and testing the software. These aspects of software engineering form the major component of the course. Since project management skills are crucial for the successful development of a software product, the course also covers project management techniques as they pertain to software engineering. This includes the topics of project scheduling, software estimation, and risk management.
Assessment:
Coursework 40%
(2 Assignments: 14% and 1 Group Project: 26%)
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 2 AND EVENING UNIVERSITY - SEMESTER 2
COURSE CODE: INFO 3435
COURSE TITLE: E-COMMERCE
NUMBER OF CREDITS: 4
PREREQUISITE: INFO 2400
COURSE DESCRIPTION: This course provides broad coverage of e-commerce systems. It covers the various e-commerce business models and e-commerce payment systems.
Assessment:
Coursework 40%
(1 Group Project)
Final Examination - One 2-hour written paper 60%
LEVEL: III  
SEMESTER: 2  
COURSE CODE: INFO 3490  
COURSE TITLE: PROJECT  
NUMBER OF CREDITS: 4  
PREREQUISITES: INFO 2400 AND INFO 2420  

COURSE DESCRIPTION: This course requires the student to implement an IT project of an appropriate scope. The student will liaise with an academic supervisor. Several lectures will be given on project management and research methodologies.

COURSE CONTENT: Assessing project feasibility. Methods of investigation. Project planning. Project management methodology. Select and implement an appropriate project on some topic in IT. This may include design and implementation of a computer application.

Assessment:
Coursework 80%  
(Requirements Engineering: 10%, Project Management: 10%, Project Planning: 10%, Software Design and Implementation: 40%, Software Testing: 5%, Documentation: 5%)
Presentation 20%  
(NO FINAL WRITTEN EXAMINATION)

LEVEL: III  
SEMESTER: NOT OFFERED 2012/2013  
COURSE CODE: INFO 3500  
COURSE TITLE: USER INTERFACE DESIGN AND DEVELOPMENT  
NUMBER OF CREDITS: 4  
PREREQUISITES: INFO 2400  

COURSE DESCRIPTION: Human-computer Interaction is an interdisciplinary field that integrates theories and methodologies from Computer Science, cognitive psychology, design, and many other areas. The course is intended to introduce the student to the basic concepts of Human-computer Interaction. It will cover the basic theory and methods that exist in the field. The course will unfold by examining design and evaluation. Case studies are used throughout the readings to exemplify the methods presented and to lend a context to the issues discussed. The students will gain principles and skills for designing and evaluating interactive systems.

Among the topics studied are the design and evaluation of effective user interaction designs, including principles and guidelines for designing interactive systems. Additionally, much emphasis is given to the development process for user interaction designs as an integral, but different, part of interactive software development. User interaction development activities include requirements and task analysis, usability specifications, design, prototyping, and evaluation. It is a goal of this course to help students realize that user interface development is an ongoing process throughout the full product life cycle, and developing the human-computer interface is not something to be done at the last minute, when the “rest of the system” is finished.

During the course the students will be involved with a real problem solving/software development project. Students will be required to gather functional requirements, identify the problem, form a solution and present this solution.

COURSE CONTENT: Introduction to Human-Computer Interaction. Task-centred system design: Task-centred process; Development of task examples; evaluation of designs through a task-centered walk-through. User-centred design and prototyping: Assumptions; Participatory design; Methods for involving the User; Prototyping: Low fidelity prototypes, medium fidelity prototypes; wizard of Oz examples. Methods for evaluation of interfaces with Users: Goals of evaluation, approaches, ethics, introspection; Extracting the conceptual model; direct observation; constructive interaction, interviews and questionnaires; continuous evaluation via user feedback and field studies; choosing an evaluation method. Beyond screen design: characteristics of good representations; information visualization, Tufte’s guidelines; visual variables, metaphors, direct manipulation. Graphical screen design. graphical design concepts. components of visible language; graphical design by grids. Design principles and usability heuristics: design principles; principles to support usability; golden rules and heuristics; HCI patterns. Current and future HCI: mobile, multimedia, ubiquitous, gesture interfaces; biometric, affective, natural interfaces; interfaces for disabled and people with special needs; Interfaces for Disabled. HCI design standards: process-oriented standards; product-oriented standards; strengths and limitations of HCI Standards.

Assessment:
Coursework (3 Assignments) 70%  
Final Examination - One 2-hour written paper 30%
LEVEL: III  
SEMESTER: NOT OFFERED 2012/2013  
COURSE CODE: INFO 3510  
COURSE TITLE: NETWORKING FOR PROFESSIONALS  
NUMBER OF CREDITS: 4  
PREREQUISITES: INFO 2500  
COURSE DESCRIPTION: This course introduces students to Local-Area-Network (LAN) switching equipment, protocols and topologies. Students learn about Classless Routing, RIP V2, Single Area OSPF, EIGRP, the Spanning Tree Protocol and differentiate between cut-through and store-and-forward LAN switching. Lab activities include implementing VLSM, RIP V2, OSPF, EIGRP, and trunking and routing VLANs. Students create virtual LANs and analyze various LAN segmentations.  
Assessment:  
Coursework 40%  
(2 Assignments: 20%;  
1 one-hour written Examination: 10% and  
1 one-hour practical Examination: 10%)  
Final Examination - One 2-hour written paper 60%

LEVEL: III  
SEMESTER: NOT OFFERED 2012/2013  
COURSE CODE: INFO 3520  
COURSE TITLE: DATABASE ADMINISTRATION FOR PROFESSIONALS  
NUMBER OF CREDITS: 4  
PREREQUISITES: INFO 2415  
COURSE DESCRIPTION: This course introduces students to Database Administration. Students taking the course should have a basic understanding of how database concepts and SQL commands. The course provides practical experience in setting up and maintaining a MySQL/Oracle server, including backing up, recovery, configuration and optimization strategies.  
This course is suitable for delegates intending to sit the ‘Certified MySQL DBA 1’ and ‘Certified MySQL DBA 2’ examinations.  
COURSE CONTENT: MySQL Administrator: Installation and Tools; Interpreting Error and Diagnostic Information. MySQL Architecture: Client/Server Overview; Communication Protocols; The SQL Parser and Storage Engine Tiers; How MySQL Uses Disk Space; How MySQL Uses Memory. Installing, Configuring, Starting and Stopping: MySQL Distributions - Installing on Windows, Installing on Linux and UNIX; Some Security Issues. Table Management: Tables, Data Types and Character Set Support; Table Management; Locking Concepts; Storage Engines; Table Maintenance. Backup and Recovery: Planning and Implementing a Backup and Recovery Strategy; Defining a Disaster Recovery Plan. User Management: Managing Privileges. Stored Routines for Administration: Types of Stored Routines; Benefits of Stored Routines; Stored Routines Features; Stored Routine Maintenance; Stored Routine Privileges and Execution Security; Triggers. Securing the Server: Security Issues; Operating System Security; Filesystem Security; Log Files and Security; Network Security. Optimizing Queries and Processes: Optimization Overview; Optimization Process; Planning a Routine Monitoring Regime; Optimization and Indexes; Indexes for Performance; Optimizing Schemas; Normalization; Optimizing the Server; Measuring Server Load; Optimizing the Environment; Choosing the Platform; Hardware Configurations. The Event Scheduler: Event scheduler concepts; Event scheduler configuration; Creating, altering and dropping events; Event scheduler monitoring; Events and privilege  
Assessment:  
(2 Assignments: 20% and 2 Projects: 20%)  
Final Examination - One 2-hour written paper 60%

LEVEL: III  
SEMESTER: NOT OFFERED 2012/2013  
COURSE CODE: INFO 3530  
COURSE TITLE: GEOGRAPHIC INFORMATION SYSTEMS FOR BUSINESS  
NUMBER OF CREDITS: 4  
PREREQUISITES: INFO 2415  
COURSE DESCRIPTION: This course introduces students to the subject of geographic information systems. Students are introduced to the characteristics of geographical data including coordinate systems and projections. Spatial data models are presented with a view of laying the foundation to understanding the usefulness of Geographic Information Systems (GIS) in organizations that use geographic data. Database structure and design are delivered in the context of managing spatial records and analysis techniques for interrogating such data are discussed. GIS is also presented as a tool used to effect business process re-engineering; the type of Information System enhancement which can significantly alter the productivity of business positively.  
Assessment:  
Coursework 40%  
(2 Assignments: 20%; and 2 Projects: 20%)  
Final Examination - One 2-hour written paper 60%
LEVEL: 0 (PRELIMINARY)
SEMESTER: 1
COURSE CODE: MATH 0100
COURSE TITLE: PRE-CALCULUS
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC MATHEMATICS OR EQUIVALENT

COURSE DESCRIPTION: The following topics will be treated with the minimum of rigour, but with emphasis on the understanding of the concepts involved.
Algebra: Elementary logic, number sets, real numbers, functions, inequalities, complex numbers, surds, logarithms, linear and quadratic equations, finite series, binomial theorem, mathematical induction.
Trigonometry: Trigonometric functions and their inverses, addition and multiplication formulae, identities, trigonometric equations, solutions of triangles.

Assessment:
Coursework - Test 40%
Final Examination - One 3-hour paper 60%

LEVEL: 0 (PRELIMINARY)
SEMESTER: 2
COURSE CODE: MATH 0110
COURSE TITLE: CALCULUS AND ANALYTICAL GEOMETRY
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC MATHEMATICS OR EQUIVALENT

COURSE DESCRIPTION: The following topics will be treated with the minimum of rigour, but with emphasis on the understanding of the concepts involved.

Assessment:
Coursework - Test 40%
Final Examination - One 3-hour paper 60%
LEVEL: I - UNDERGRADUATE SERVICE COURSE
SEMESTERS: 1, 2 & SUMMER
COURSE CODE: MATH 1125
COURSE TITLE: FUNDAMENTAL MATHEMATICS FOR THE GENERAL SCIENCES II
NUMBER OF CREDITS: 3
PREREQUISITES: EITHER CSEC MATHEMATICS (OR EQUIVALENT) OR MATH 1115
Assessment:
Coursework 40%
Final Examination: One 2-hour written paper 60%

LEVEL: I
SEMESTER: I
COURSE CODE: MATH 1141
COURSE TITLE: INTRODUCTORY LINEAR ALGEBRA AND ANALYTICAL GEOMETRY
NUMBER OF CREDITS: 3
PREREQUISITES: TWO UNITS OF CAPE PURE MATHEMATICS, OR MATH 0100 AND MATH 0110 OR EQUIVALENT
COURSE DESCRIPTION: Vectors in two and three dimensions, the dot product and cross – product. Applications to geometry of lines and planes. Complex numbers as vectors. De Moivre’s Theorem; basic algebra of matrices of any order. Determinants. Solutions of systems of linear equations
Assessment:
Coursework 40%
Final Examination: One 3-hour written paper 60%

LEVEL: I
SEMESTER: 1
COURSE CODE: MATH 1142
COURSE TITLE: CALCULUS I
NUMBER OF CREDITS: 3
PREREQUISITES: TWO UNITS (1&2) OF CAPE PURE MATHEMATICS OR MATH 0100 AND MATH 0110, OR EQUIVALENT
COURSE DESCRIPTION: Functions; elementary functions; definition of derivative and rules of differentiation. Applications to maxima, minima and curve tracing; Taylor and Maclaurin Series. Evaluation of indefinite integrals using substitution, integration by parts and partial fractions. Length of curve and areas of regions. First order differential equations and second order differential equations with constant coefficients.
Assessment:
Coursework 40%
Final Examination - One 3-hour written paper 60%

LEVEL: I
SEMESTER: 1
COURSE CODE: MATH 1151
COURSE TITLE: CALCULUS II
NUMBER OF CREDITS: 3
PREREQUISITES: TWO UNITS (1&2) OF CAPE PURE MATHEMATICS OR MATH 0100 AND MATH 0110, OR EQUIVALENT
COURSE DESCRIPTION: Neighbourhoods and bounds of a function; definition of limit; properties of limits; continuity; the Intermediate Value Theorem; The derivative; Rolle's Theorem; The Mean Value Theorem L'Hospital's Rule. The Riemann Integral : Fundamental Theorem of the Calculus. Partial Derivatives. Double integrals.
Assessment:
Coursework 40%
Final Examination - One 3-hour written paper 60%
LEVEL: I
SEMESTER: 1
COURSE CODE: MATH 1152
COURSE TITLE: SETS AND NUMBER SYSTEMS
NUMBER OF CREDITS: 3
PREREQUISITES: TWO UNITS OF CAPE PURE MATHEMATICS, OR MATH 0100 AND MATH 0110 OR EQUIVALENT
COURSE DESCRIPTION: Set Theory. Elementary mathematical logic: logical statements, logical operations AND, OR and NOT. Illustration using Venn diagrams, Algebra of Sets. Relations and Binary operation Properties of the natural numbers; basic arithmetic of complex numbers. The polar and exponential forms of a complex number.
Assessment:
Coursework 40%
Final Examination: One 3-hour written paper 60%

LEVEL: I
SEMESTER: 1
COURSE CODE: MATH 1160
COURSE TITLE: INTRODUCTORY APPLIED MATHEMATICS I
NUMBER OF CREDITS: 6
PREREQUISITES: TWO UNITS OF CAPE MATHEMATICS OR MATH 0100 AND MATH 0110, OR ITS EQUIVALENT
COURSE DESCRIPTION: Vectors. Introduction to Statics: Coplanar forces:- forces acting at a point, moments, parallel forces, couples.
Centre of Gravity.
Simple Harmonic Motion.
Assessment:
Coursework 40%
Final Examination - One 3-hour written paper 60%

LEVEL: I
SEMESTER: 2
COURSE CODE: MATH 1170
COURSE TITLE: INTRODUCTORY APPLIED MATHEMATICS II
NUMBER OF CREDITS: 6
PREREQUISITES: TWO UNITS OF CAPE MATHEMATICS OR MATH 0100 AND MATH 0110, OR ITS EQUIVALENT
Assessment:
Coursework 40%
Final Examination - One 3-hour written paper 60%

LEVEL: I
SEMESTER: II
COURSE CODE: MATH 1191
COURSE TITLE: INTRODUCTION TO MATHEMATICAL SOFTWARE I
NUMBER OF CREDITS: 1
PREREQUISITES: TWO UNITS OF CAPE MATHEMATICS OR MATH 1125, OR EQUIVALENT
COURSE DESCRIPTION: The course consists of an introduction to Excel and Maple.
EXCEL
Basic operations; constructing and editing formulae; changing worksheet layout; sorting and filtering. Using the Analysis Tool pack; Statistical Analysis in Excel; Intro to Visual basic.
MAPLE
Introduction to arithmetical operations with real numbers, integers, vectors and matrices; symbolic computation; plots, including 3d plots; solving polynomial equations and systems of linear equations; calculus and differential equations; programming in Maple.
Assessment:
Coursework 40%
Final Examination - One 3-hour written paper 60%
LEVEL: II
SEMESTERS: 1 AND EVENINGS - SEMESTER 1
COURSE CODE: MATH 2100
COURSE TITLE: ABSTRACT ALGEBRA
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR MATH1141 AND MATH1152
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTERS: 2 AND EVENINGS - SEMESTER 2
COURSE CODE: MATH 2110
COURSE TITLE: LINEAR ALGEBRA
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR MATH 1141 AND MATH 1152
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTERS: 1 AND EVENINGS - SEMESTER 1
COURSE CODE: MATH 2120
COURSE TITLE: ANALYSIS & MATHEMATICAL METHODS I
NUMBER OF CREDITS: 4
PREREQUISITES: MATH 1140 AND MATH 1150 OR MATH 1141, MATH 1142, MATH 1151 AND MATH 1152
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMESTERS: 1 AND EVENINGS - SEMESTER 1
COURSE CODE: MATH 2140
COURSE TITLE: INTRODUCTION TO PROBABILITY
NUMBER OF CREDITS: 4
PREREQUISITES: MATH 1140 OR MATH 1150 OR MATH 1141 AND MATH 1152 OR MATH 1142 AND MATH 1151
COURSE DESCRIPTION: Basic Probability rules, including Bayes rule, theorem on total probability; Conditional Probability; Random Variable; Mathematical Expectation; means, variance; Convariance of variables. Variance of sum of n random variables. Chebychevis theorem; Standard density functions and mass functions; Moment generating function. Random sample; some important statistics, sampling distributions. Central limit theorem.
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%
LEVEL: II
SEMMESTERS: 2 AND EVENINGS - SEMESTER 2
COURSE CODE: MATH 2150
COURSE TITLE: INTRODUCTION TO STATISTICS
NUMBER OF CREDITS: 4
PREREQUISITES: MATH 2140 OR MATH 3110
COURSE DESCRIPTION: Theory of Estimation: Ideas of point estimation; mean-squared error; interval estimation; method of maximum likelihood; Cramer-Rao Inequality. Hypothesis Testing: Type I and Type II errors; tests concerning means, variances and proportions; Goodness of fit Tests; non-parametric tests. Ideas of Regression Analysis including simple linear Regression in detail; Experimental Design and the Analysis of Variance (Completely Randomised Design, Block Designs, Latin Squares, Factorial Designs).
Assessment:
Coursework 40%
Final Examination - One 2-hour paper 60%

LEVEL: II
SEMMESTERS: 2 AND EVENINGS - SEMESTER 2
COURSE CODE: MATH 2160
COURSE TITLE: ANALYSIS & MATHEMATICAL METHODS II
NUMBER OF CREDITS: 4
PREREQUISITES: MATH 1140 AND MATH 1150 OR MATH 1141, MATH 1142, MATH 1151 AND MATH 1152
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: II
SEMMESTER: 1
COURSE CODE: MATH 2170
COURSE TITLE: INTRODUCTION TO COMBINATORICS
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR MATH 1141 AND MATH 1152
COURSE DESCRIPTION: Permutations and Combinations. The Inclusion - Exclusion Principle. Linear equations with unit coefficients; Recurrence relations; Generating functions; Geometry of the plane; Colouring problems; Combinatorial probability. Partitions of integer; Random walks; Designs.
Assessment:
Coursework 25%
Final Examination - One 2-hour written paper 75%

LEVEL: II
SEMMESTER: 2
COURSE CODE: MATH 2180
COURSE TITLE: INTRODUCTION TO OPTIMIZATION
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR MATH 1141 AND MATH 1152
COURSE DESCRIPTION: Graphs and Digraphs; Ranking; Shortest Path; Communication Networks; Convex sets; Linear programming; Simplex Method; Theory of games.
Assessment:
Coursework Examination 25%
Final Examination - One 2-hour written paper 75%

LEVEL: II
SEMMESTER: 2
COURSE CODE: MATH 2190
COURSE TITLE: PROBABILITY AND STATISTICS I
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 1140 OR MATH 1141 OR MATH 1150 OR MATH 1141 AND MATH 1152 OR MATH1142 AND MATH 1151
N.B. STUDENTS TAKING MATH 2190 CANNOT ALSO GET CREDIT FOR MATH 2140 AND MATH 2150
Comment: MATH 2190 is a four (4) credit alternative to both MATH 2140 and MATH 2150 and is primarily aimed at non-Mathematics Majors.
Assessment:
Coursework 40%
Final Examination - One 2-hour paper 60%
LEVEL: II  
SEMESTER: 1  
COURSE CODE: MATH 2210  
COURSE TITLE: MATHEMATICS OF FINANCE  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 1140 AND MATH 1150 OR MATH 1141, MATH 1142, MATH 1151 AND MATH 1152  
COURSE DESCRIPTION: Introduction to actuarial science; measurement of interest; solutions of problems in interest, basic annuities; more general annuities, yield rates, amortization schedules and sinking funds, bonds and other securities, practical applications.  
Assessment:  
Coursework  40%  
Final Examination - One 2-hour written paper  60%  

LEVEL: II  
SEMESTER: NOT OFFERED IN 2012/2013  
COURSE CODE: MATH 2200  
COURSE TITLE: PROBABILITY AND STATISTICS II  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 2190  
N.B. STUDENTS TAKING MATH 2190 CANNOT ALSO GET CREDIT FOR MATH 2140 AND MATH 2150  
COURSE DESCRIPTION: Probability Theory: Conditional expectation for discrete random variables, Bayes Theorem, transformations of one random variable, evaluation of probabilities of events for continuous bivariate random variables, transformations of two random variables, the squared distributions, moment generating functions; proof of the Central Limit Theorem, Markov and Chebychev inequalities, the weak law of large numbers. Statistical Inference: Unbiasedness, Fisher information and the Cramer-Rao inequality (without proof), sufficiency, the Fisher factorization criterion, the Neyman-Pearson lemma. Statistical Methods: Factorial designs; non-parametric rank methods, the sign test, squared rank test, rank sum test, Kruskal-Wallis test, goodness of fit tests. Sampling Theory of Surveys: Simple random samples, stratified samples, ideas underlying other sampling schemes, non-sampling sources of error including non-response and poor sampling design.  
Assessment:  
Coursework  40%  
Final Examination - One 2-hour paper  60%  

LEVEL: III  
SEMESTER: NOT OFFERED IN 2012/2013  
COURSE CODE: MATH 3110  
COURSE TITLE: MATHEMATICAL STATISTICS - PROBABILITY THEORY  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2120 AND PERMISSION OF THE HEAD OF DEPARTMENT  
N.B. STUDENTS CANNOT GET CREDITS FOR BOTH MATH 2140 AND MATH 3110  
COURSE DESCRIPTION: Basic Probability rules, including Bayes rule, theorem on total probability; Conditional Probability; Random Variable; Mathematical Expectation; means, variance; Covariance of variables. Variance of sum of n random variables, Chebychevis theorem; Standard density functions and mass functions; Moment generating function. Random sample; some important statistics, sampling distributions. Central limit theorem. Transformations of several random variables; order statistics; conditional expectation; the bivariate and multivariate normal distributions.  
Assessment:  
Coursework  40%  
Final Examination - One 2-hour written paper  60%
LEVEL: III
SEMESTER: NOT OFFERED IN 2012/2013
COURSE CODE: MATH 3120
COURSE TITLE: MATHEMATICAL STATISTICS - STATISTICAL INFERENCE
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 3110
N.B. STUDENTS CANNOT GET CREDITS FOR BOTH MATH 2150 AND MATH 3120
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 1
COURSE CODE: MATH 3240
COURSE TITLE: REAL ANALYSIS
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 2120
Assessment:
Coursework 25%
Final Examination - One 2-hour written paper 75%

LEVEL: III
SEMESTER: NOT OFFERED IN 2010/2011
COURSE CODE: MATH 3260
COURSE TITLE: FLUID DYNAMICS II
NUMBER OF CREDITS: 4
PREREQUISITE: MATH 3250
COURSE DESCRIPTION: Further Two-dimensional Flows; Some Three-dimensional Flows; Viscous Flows
Assessment:
Coursework 40%
Final Examination - One 2-hour written paper 60%

LEVEL: III
SEMESTER: 1
COURSE CODE: MATH 3280
COURSE TITLE: INTRODUCTION TO MATHEMATICAL MODELLING I
NUMBER OF CREDITS: 4
PREREQUISITES: MATH 2120 AND MATH 2160
COURSE DESCRIPTION: Idea of modelling real life and situations using Mathematics. Theory of ordinary differential equations (eigenvalues and eigenvectors) and the linear stability. Application to Medicine (e.g. testing of diabetics). Predator-Prey models (struggle for survival between two species). Epidemiology (e.g. model of the spread of gonorrhea). A theory of war.
Assessment:
Coursework 25%
Final Examination - One 2-hour written paper 75%
LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3290  
COURSE TITLE: COMBINATORICS  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 2100 OR MATH 2110  
COURSE DESCRIPTION: Permutations and Combinations; Generating functions; Recurrence Relations; The Principle of Inclusion and Exclusion; Matching polynomials and Rook polynomials; Polyaïs theory of counting.  
Assessment:  
Coursework: 25%  
Final Examination - One 2-hour written paper: 75%  
LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3310  
COURSE TITLE: LIFE CONTINGENCIES  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2140, MATH 2150 AND MATH2220  
COURSE DESCRIPTION: Multiple life functions, multiple decrement model; insurance models including expenses; non-forfeiture, benefits and dividends; valuation theory for pension plans.  
Assessment:  
Coursework (one in-course test): 40%  
Final Examination - One 2-hour written paper: 60%  
LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3320  
COURSE TITLE: Risk Theory  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2120, MATH2160, MATH 2140 AND MATH2150  
Course Description: Review of earlier statistical work: individual risk theory; other frequency distributors; mixed distributions; stoploss insurance; ruin theory  
Assessment:  
Coursework: 40%  
Final Examination - One 2-hour written paper: 60%  
LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3321  
COURSE TITLE: PRINCIPLES OF ASSET/LIABILITY MANAGEMENT ACTUARIAL SCIENCE  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2210, MGMT 2023 AND MGMT 3048  
Course Description: Review of Macroeconomics; characteristics of the various types of investments used to fund financial security programmes; traditional techniques of financial analysis used in selecting and managing investment portfolios. The course builds on the material in courses MGMT2023 (MS28D) and MGMT3048 (MS38H), introducing further tools and techniques of asset/liability management, general product design, as well as issues of pricing and valuation and asset management.  
Assessment:  
Coursework: 40%  
Final Examination - One 2-hour written paper: 60%  
LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3351  
COURSE TITLE: REGRESSION AND TIME SERIES ANALYSIS  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 2140 AND MATH 2150  
COURSE DESCRIPTION: This course continue on the applied aspects of M25B such as analysis of variance, regression analysis, design of experiments and categorical data analysis, time series analysis, stochastic processes and decision theory.  
Assessment:  
Coursework:  
In-course Tests: 30%  
Assignments: 10%  
Final Examination - One 2-hour written paper: 60%  
LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3354  
COURSE TITLE: ACTUARIAL PROJECT  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH2210, MATH2220 AND MATH3310  
COURSE DESCRIPTION: This course requires the student to develop an actuarial solution to a problem define of an appropriate scope. The project may be application oriented where the student builds a business solution similar to what is required to solve actuarial problems. The project should require the student to draw on the skills developed across several Actuarial Science courses.  
Assessment:  
Coursework:  
Project report: 80%  
Presentation: 20%
LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3400  
COURSE TITLE: GRAPH THEORY  
NUMBER OF CREDITS: 4  
PREREQUISITE: MATH 2100  
Assessment:  
Coursework 15%  
Final Examination - One 2-hour written paper 85%  

LEVEL: III  
SEMESTER: NOT OFFERED IN 2012/2013  
COURSE CODE: MATH 3410  
COURSE TITLE: COMBINATORICS AND COMPUTING  
NUMBER OF CREDITS: 4  
PREREQUISITES: COMP 1100, COMP 1200, MATH 2170 AND MATH 2180  
Assessment:  
Coursework - A project consisting of a computer implementation together with a project report 25%  
Final Examination - One 2-hour written paper 75%  

LEVEL: III  
SEMESTER: NOT OFFERED IN 2012/2013  
COURSE CODE: MATH 3420  
COURSE TITLE: SPECIAL TOPICS IN GRAPH THEORY  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2170, MATH 2180 AND MATH 3400  
COURSE DESCRIPTION: The syllabus and content at any one time will depend on the research interests of the lecturer; for example, F-Polynomials of Graphs. Relevant course material will be made available.  
Assessment:  
Coursework - A project accounting for  
(a) project report 15%  
(b) 1-hour seminar 10%  
Final Examination - One 2-hour written paper 75%  

LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3430  
COURSE TITLE: ADVANCED ALGEBRA I - THEORY  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2100 AND MATH 2110  
Assessment:  
Coursework - (Assignment 5%) 25%  
(Two written exams 10% each)  
Final Examination - One 2-hour written paper 75%  

LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3440  
COURSE TITLE: ADVANCED ALGEBRA II - APPLICATIONS  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 3430  
COURSE DESCRIPTION: Straight-edge and Compass constructions; Coding theory; Polynomial and matrix representation of codes; Applied Linear Algebra; Change of basis; Linear transformation; Functions of matrices; The Jordan Canonical form of a matrix; Solution of systems of differential equations; Quadric surfaces.  
Assessment:  
Coursework - (Assignment 5%) 25%  
(Two written exams 10% each)  
Final Examination - One 2-hour written paper 75%  

LEVEL: III  
SEMESTER: 1  
COURSE CODE: MATH 3450  
COURSE TITLE: STATISTICAL THEORY I  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2120 AND EITHER MATH 2140 OR MATH 3110  
COURSE DESCRIPTION: Joint and Conditional Distributions; Distribution of Functions of Random variables; Moment Generating Function Techniques; Order statistics; Poisson Process; Finite Markov Chains; Introduction to Queueing Theory.  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%
LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3460  
COURSE TITLE: STATISTICAL THEORY II  
NUMBER OF CREDITS: 4  
PREREQUISITES:  
(I) MATH 2140 OR MATH 3110 (II) MATH 2150 OR MATH 3120 (III) MATH 2120  
COURSE DESCRIPTION: Methods of finding estimators and their properties Bayesian Inference; Regression Analysis; Time Series Analysis; Testing of Hypotheses; Design of Experiments; Sampling Theory.  
Assessment:  
Coursework 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3470  
COURSE TITLE: SAMPLING THEORY  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2150 OR ECON 2006 (MINIMUM QUALITY POINTS 3.3)  
COURSE DESCRIPTION: Basic ideas concerning the design and uses of sample surveys. Sampling techniques: Simple random sampling (with derivations of basic results), Stratified sampling, Cluster sampling (one and two stage), Systematic sampling, Non-response and missing data in sample surveys. Designing forms and collecting data. Interpretation of data and survey report writing. Topics in the sampling of non-human populations.  
Assessment:  
Coursework - (in-course examinations and projects) 40%  
Final Examination - One 2-hour written paper 60%  

LEVEL: III  
SEMESTER: 2  
COURSE CODE: MATH 3500  
COURSE TITLE: COMPLEX ANALYSIS  
NUMBER OF CREDITS: 4  
PREREQUISITES: MATH 2120 AND MATH 2160  
Assessment:  
Coursework 25%  
Final Examination - One 2-hour written paper 75%  

LEVEL: II  
SEMESTERS: 2  
COURSE CODE: MGMT 2003  
COURSE TITLE: PRINCIPLES OF MARKETING  
NUMBER OF CREDITS: 3  
PREREQUISITES: ECON 1001 AND ACCT 1002  
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES  
COURSE DESCRIPTION: This course is intended to provide students with the conceptual framework and analytical skills necessary for the analysis of markets and marketing activities of firms in a dynamic environment.  
Assessment:  
Coursework 40%  
Final Examination 60%  

LEVEL: II  
SEMESTER: 2  
COURSE CODE: MGMT 2006  
COURSE TITLE: MANAGEMENT INFORMATION SYSTEMS I  
NUMBER OF CREDITS: 3  
PREREQUISITES: NONE  
COURSE DESCRIPTION: This course provides an overview of Management Information Systems. It describes the components of Management Information Systems and the relationship of MIS to the larger area of Organisation and Management. Information Systems Technology is covered.  
Assessment:  
Coursework 25%  
Final Examination 75%  

LEVEL: II  
SEMESTER:  
COURSE CODE: MGMT 2007  
COURSE TITLE: INTRODUCTION TO E-COMMERCE  
NUMBER OF CREDITS: 3  
PREREQUISITES/CO-REQUISITE: MKTG 2080 AND MGMT 2006  
COURSE DESCRIPTION: This course aims to prepare students with the requisite fundamentals to enable them to provide the business perspective/inputs to the e-commerce adoption process. Emphasis will be on the underlying commercial principles of e-commerce rather than on the technological processes. Topics to be covered include: internet demographics; internet business models; customer support strategies; security issues in e-commerce; legal issues in e-commerce; logistical challenges for Caribbean e-commerce.  
Assessment:  
Coursework 40%  
Final Examination 60%  

Return to Table of Contents  
Faculty of Science & Technology Online
LEVEL: II
SEMESTERS: 2
COURSE CODE: MGMT 2008
COURSE TITLE: ORGANISATIONAL BEHAVIOUR
NUMBER OF CREDITS: 3
PREREQUISITES FOR CHEMISTRY AND MANAGEMENT STUDENTS: SOCI 1002 OR MGMT 1001 OR AGEX 1000
FOR COMPUTER SCIENCE AND MANAGEMENT STUDENTS: SOCI 1002 OR MGMT 1001 OR AGEX 1000 OR COMP 1100
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This course uses the systems approach to organisations to highlight how interrelated variables such as people, technology, task, structure and external environments impact on organisational effectiveness. Emphasis is on the nature of behavioural issues and how and why they impact on the functioning of organisations.
Assessment:
Coursework 40%
Final Examination 60%

LEVEL: II
SEMESTERS: 2
COURSE CODE: MGMT 2012
COURSE TITLE: QUANTITATIVE METHODS
NUMBER OF CREDITS: 3
PREREQUISITES: FOR CHEMISTRY AND MANAGEMENT STUDENTS: ECON 1001 AND CHEM1060
FOR COMPUTER SCIENCE & MANAGEMENT STUDENTS: ECON1002 AND MATH1140
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This course is an introductory level survey of quantitative techniques commonly used to provide insight into business decisions. The primary emphasis is on preparing the student to become an intelligent user of these techniques.
Assessment:
Coursework 25%
Final Examination 75%

LEVEL: II
SEMESTERS: 2
COURSE CODE: MGMT 2021
COURSE TITLE: BUSINESS LAW
NUMBER OF CREDITS: 3
PREREQUISITES: NONE
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: The main focus of this course is the general principles of the law of contract, the law of Agency as well as other related areas of interest like the Sale of Goods Act and the Hire Purchase Act 1938 and 1954. Background material covers the role and function of the law in society, the sources of the law, the legal system etc.
Assessment:
Coursework 25%
Final Examination 75%

LEVEL: II
SEMESTERS: 2
COURSE CODE: MGMT 2023
COURSE TITLE: FINANCIAL MANAGEMENT I
NUMBER OF CREDITS: 3
PREREQUISITES:
For Chemistry and Management Students: ACCT 1002 AND ECON 1003 OR CHEM1060
For Computer Science & Management Students: ACCT 1002 AND MATH 1140
For BSc Actuarial Students: ECON 1002 AND ACCT 1002
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This course is concerned with the core concepts of financial decision-making; the time-value of money, the cost of capital and trade-offs between risk and return. Students should develop a thorough understanding of these basic concepts and how to apply them in real-world examples.
Assessment:
Coursework 40%
Final Examination 60%
LEVEL: II
SEMESTER: 2
COURSE CODE: MGMT 2032
COURSE TITLE: MANAGERIAL ECONOMICS
NUMBER OF CREDITS: 3
PREREQUISITES:
For Chemistry and Management Students: ECON 1001 AND CHEM 1060
For Computer Science & Management Students: ECON1002 AND MATH1140
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This course is concerned with the application of economic principles and methodologies to the decision-making process of the business firm operating under conditions of risk and uncertainty. Emphasis is also placed on the firm's competitive strategy.
Assessment:
Coursework 25%
Final Examination 75%
LEVEL: III
SEMESTER: 1
COURSE CODE: MKTG3000
COURSE TITLE: MARKETING MANAGEMENT
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 2003
DEPARTMENT RESPONSIBLE: MANAGEMENT STUDIES
COURSE DESCRIPTION: This course is concerned with the development of the student's marketing decision-making and students are expected to undertake a marketing project based on fieldwork.
Assessment:
Coursework 30%
Final Examination 70%
LEVEL: III
SEMESTER: 1
COURSE CODE: MGMT 3011
COURSE TITLE: MANAGEMENT INFORMATION SYSTEMS II (ANALYSIS AND DESIGN)
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 2006
COURSE DESCRIPTION: This course addresses the need for managers to understand the requirements for Information Systems, to participate in the design of systems and to manage the procurement of systems.
LEVEL: III
SEMESTER: 2
COURSE CODE: MGMT 3017
COURSE TITLE: HUMAN RESOURCE MANAGEMENT
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 2008
COURSE DESCRIPTION: This course provides participants with a broad overview of issues pertaining to human resource management with special reference to the Caribbean environment.
LEVEL: III
SEMESTER: 1
COURSE CODE: MKTG 3007
COURSE TITLE: MARKETING PLANNING
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 2003, MGMT 2012 AND MGMT 2023
COURSE DESCRIPTION: This intention is to equip students with the tools necessary for effective marketing planning in the public and private sectors. Analytical methods and data sources necessary in defining competition, analysing an industry and customers, and forecasting market potential is covered in depth. Students are expected to develop an actual marketing plan as a coursework project.
Assessment:
Coursework 30%
Final Examination 70%
LEVEL: III
SEMESTER: 1
COURSE CODE: MGMT 3057
COURSE TITLE: PRODUCTION AND OPERATIONS
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 2012
COURSE DESCRIPTION: This course is intended to present students with an up-to-date view of primary activities of the production/operations functions in organisations. The production/operations function is an area of management that has a profound effect on efficiency, productivity and the quality of our daily lives. Focusing on Caribbean economies, the course will examine the resources that are required in the production of goods and services and illustrate the method of their acquisition utilisation, and upkeep. The topics to be covered will be shown to apply not only to the manufacturing sector but to the service sectors as well such as banks, hospitals, etc.
Assessment:
Coursework 30%
Final Examination 70%
LEVEL: III
SEMESTER: 2
COURSE CODE: MGMT 3060
COURSE TITLE: OPERATIONS, PLANNING AND CONTROL
NUMBER OF CREDITS: 3
PREREQUISITES: MGMT 3057
COURSE DESCRIPTION: Building on the earlier course in Production and Operations Management, this course is intended to illustrate the array of planning and control techniques available to management to ensure the maximum productivity, quality, efficiency and profitability of the various operation systems involved in the production of goods and services.
Assessment:
Coursework 25%
Final Examination 75%

LEVEL: 0 (PRELIMINARY)
SEMESTER: 1
COURSE CODE: PHYS 0070
COURSE TITLE: PRELIMINARY PHYSICS I
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC PHYSICS OR EQUIVALENT.
COURSE DESCRIPTION: Mechanics, Heat and Waves & Sound.
SI system and standard units, dimensional analysis, vectors (graphical analytical); Equilibrium, Newton’s first law, third law, friction, motion in a straight line, average and instances velocity and acceleration, accelerated motion, free fall. Relative velocity; motion in a plane, projectiles, circular motion, centripetal force, Newton’s second law and applications; Gravitation, mass and weight, satellite motion; Work and kinetic energy, gravitational and elastic potential energy, dissipative and conservative forces, power, equilibrium: Stress, strain, elastic modulus, force constant, Hooke’s law, simple harmonic motion (basic concepts), SHM and circular motion, mass-spring system, simple pendulum, pressure in a fluid, pressure gauges. Archimedes principle, surface tension, pressure difference across surface film, contact angle and capillaries. Bernoulli’s equation (applications), viscosity, Stoke’s law, Reynolds’s number.
The temperature concept, thermometers, scales, thermal expansion and stress; Heat capacity, phase changes, conduction, convection, radiation, Stefan-Boltzman law, ideal radiator, solar energy, ideal gas, equation of state, phase diagrams, triple and critical points, vapour pressure, effect of dissolved substances on freezing and boiling point, first law of thermodynamics, energy and work, work and heat, adiabatic, isochoric, isothermal and isobaric processes, internal energy, molecular theory of motion, kinetic theory of ideal gas.
Mechanical waves, periodic waves, wave speed, traveling waves, mathematical representation, waves at boundaries, standing waves, interference of sound waves, beats, sound intensity, the decibel, the ear and hearing, quality and pitch, Doppler effect, ultrasonics and applications.
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 3-hour Final Examination 60%
Students must pass coursework

LEVEL: 0 (PRELIMINARY)
SEMESTER: 2
COURSE CODE: PHYS 0071
COURSE TITLE: PRELIMINARY PHYSICS II
NUMBER OF CREDITS: 0
PREREQUISITES: CSEC PHYSICS OR EQUIVALENT.
COURSE DESCRIPTION: Electricity and Magnetism, Optics and Modern Physics Charge, Coulomb’s law, insulators and conductors, electric field, lines of force, electric potential, potential differences, electron volt (Millikan’s experiment,).
Capacitance, series and parallel combination, energy in a charged capacitor, dielectrics, current, resistivity, resistance, EMF, work and power, resistors in series and parallel, Kirchoff’s laws, Wheatstone bridge and potentiometer. The magnetic field, lines of force, magnetic flux, motion in a magnetic field. Thomson’s measurement of e/m, isotopes and spectrography; force on conductor, torque on a current loop, the d.c. motor, pivoted-coil galvanometer, magnetic field of a long straight wire, force between parallel conductors, the ampere, induced emf, Faraday’s law, Lorenz’s law, eddy currents.
The nature of light, speed of light (experimental), waves and rays, refraction and reflection. Snell’s law, total internal reflection, dispersion, single surface images, reflection from plane and spherical surfaces, focal point and length, refraction at plane and spherical surfaces, graphical and analytical methods, images and objects, thin lens, diverging lens, lensmaker equation, aberrations, the eye, defects of vision, magnifier, camera projector, compound microscope, telescope, Atomic nucleus, nuclear radiation, isotopes and isobars, binding energy and stability; alpha, beta and gamma rays, decay law, half-life, decay constant, activity, radioactivity series, nuclear reactions, nuclear fission, nuclear fusion, radioactive shielding, radiation and the life sciences.
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 3-hour Final Examination 60%
Students must pass coursework
LEVEL: I
SEMESTER: 1
COURSE CODE: PHYS 1001
COURSE TITLE: INTRODUCTION TO ASTRONOMY
NUMBER OF CREDITS: 3
PRE-REQUISITES: NONE
RESTRICTIONS: STUDENTS READING PHYS 3383 CANNOT BE CREDITED WITH THIS COURSE.
COURSE DESCRIPTION: This course develops the ideas of Ancient Astronomy leading up to the contributions of Copernicus, Brahe, Galileo and Newton. Optics and instrumentation. The solar system, stars: composition and evolution, white dwarfs, neutron stars, black holes. Extragalactic Astronomy: Galaxies, dark matter, dark energy, Cosmology. Life in the Universe.
Assessment:
Coursework 40%
One 2-hour Final Examination 60%

LEVEL: I
SEMESTER: 1
COURSE CODE: PHYS 1110 (REMEDIAL ONLY)
COURSE TITLE: INTRODUCTORY PHYSICS I
NUMBER OF CREDITS: 6
PREREQUISITES: CAPE PHYSICS OR CSEC PHYSICS TOGETHER WITH CAPE MATHEMATICS
COURSE DESCRIPTION: Mathematical Methods in Physics: Vectors; Complex numbers; Matrices and Determinants. Applications to Physics. Mechanics: Units and dimensions; Particle dynamics, Work and Energy; Conservation of mass, energy and momentum; Rotational kinematics; Equilibrium of rigid bodies; Oscillations; Gravitation; Properties of fluids; Fluid statics and dynamics. Optics: Reflection and refraction; Fermat’s principle; Huygen’s principle; Interference and Diffraction. Acoustics: waves in Elastic media; Acoustics and wave motion; Superposition and Interference of Waves.
Assessment:
Coursework:
Theory Coursework 10%
Practical Coursework 30%
One 3-hour Final Examination 60%
Students must pass coursework

LEVEL: I
SEMESTER: 2
COURSE CODE: PHYS 1111 (REMEDIAL ONLY)
COURSE TITLE: INTRODUCTORY PHYSICS II
NUMBER OF CREDITS: 6
PREREQUISITES: CAPE PHYSICS OR CSEC PHYSICS TOGETHER WITH CAPE MATHEMATICS
COURSE DESCRIPTION: Electricity and Magnetism: Electric Charge; Electric Field; Gauss’s Law; Electric Potential; Capacitors and dielectrics; Currents in materials; Direct-current circuits; Effects, production and properties of Magnetic Fields; Faraday’s Law; Inductance; Introduction to B, H and M vectors. AC Theory AC currents/voltages; AC in series and parallel LCR circuits; Vector, phasor and complex representation; Q factor; power; Transformers; Modern Physics: Black body radiation, Thermal radiation; Stefan’s, Wein’s and Rayleigh-Jean’s Laws; Quanta; Planck’s Law; Photoelectric effect; Davission-Germer and Thomson’s experiments; The Atom; Atomic spectra; Energy levels and the Hydrogen Atom; Bohr model; X-rays; Moseley’s Law. Thermodynamics:Thermal equilibrium; Triple point; Work; Heat; First Law of Thermodynamics; Applications of First Law; Heat capacities; Equipartition of energy; Ideal gas; Kinetic Theory; Heat conduction; application to spherical and cylindrical symmetry.
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 3-hour Final Examination 60%
Students must pass coursework
LEVEL: I
SEMESTER: I
COURSE CODE: PHYS 1211
COURSE TITLE: INTRODUCTION TO MECHANICS AND HEAT
NUMBER OF CREDITS: 3
PREREQUISITES: CAPE PHYSICS (UNITS I AND II) OR CAPE MATHEMATICS (UNITS I AND II) AND CSEC (CXC) PHYSICS OR PHYS 0070 AND PHYS 0071 OR THEIR EQUIVALENT
COURSE DESCRIPTION: This course is designed to introduce the student to topics in classical physics. Understanding Physics is crucial to the study of all sciences. Physics is the study of matter, energy, space and time and gaining a better understanding of this subject is a stepping stone to understanding the world and many of the new technologies being developed today. For this reason the topics covered address Newtonian mechanics including: kinematics, laws of motion, work and energy, systems of particles, momentum, circular motion, oscillations, and gravitation and concludes with topics in fluid mechanics, thermal physics, and kinetic theory. Through in-class discussions, problem-solving sessions and the accompanying modules in Laboratory Physics the student will have the opportunity to improve his/her ability to reason through challenging situations in the physical world using basic principles to develop appropriate solutions.
Assessment:
Final Examination (one 2-hr paper): 60%
Coursework: 40%
- Coursework (2 in-course tests) 15%
- Quizzes (2, each 5%) 10%
- Class participation 5%
- Poster presentation 10%
LEVEL: II
SEMESTER: II
COURSE CODE: PHYS 1212
COURSE TITLE: INTRODUCTION TO ELECTRICITY & MAGNETISM AND MODERN PHYSICS
NUMBER OF CREDITS: 3
PREREQUISITES: CAPE PHYSICS (UNITS I AND II) OR CAPE MATHEMATICS (UNITS I AND II) AND CSEC (CXC) PHYSICS OR PHYS 0070 AND PHYS 0071 OR THEIR EQUIVALENT
COURSE DESCRIPTION: This course is designed to introduce you to topics in classical physics. Understanding Physics is crucial to the study of all sciences. Physics is the study of matter, energy, space and time and gaining a better understanding of this subject is a stepping stone to understanding the world and many of the new technologies being developed today. This course requires the use of Calculus, Vector analysis and Complex variable theory to understand the basic concepts in Electricity, Magnetism, AC Theory and Modern Physics. Through in-class discussions, problem-solving sessions and the accompanying module in Experimental Physics you will have the opportunity to improve your ability to reason through challenging situations in the physical world using basic principles to develop appropriate solutions.
Assessment:
Final Examination (one 2-hr paper): 60%
Coursework: 40%
- Coursework (2 in-course tests) 15%
- Quizzes (2, each 5%) 10%
- Class participation 5%
- Poster presentation 10%
LEVEL: I
SEMESTER: I
COURSE CODE: PHYS 1213
COURSE TITLE: INTRODUCTION TO OSCILLATIONS AND WAVES
NO. OF CREDITS: 1.5
PREREQUISITES: CAPE PHYSICS (UNITS I AND II) OR CAPE MATHEMATICS (UNITS I AND II) AND CSEC (CXC) PHYSICS OR PHYS 0070 AND PHYS 0071 OR THEIR EQUIVALENT
COURSE DESCRIPTION: This course is designed to introduce the student to topics in the fundamentals of Acoustics and Waves. Understanding Physics is crucial to the study of all sciences. Physics is the study of matter, energy, space and time and gaining a better understanding of this subject is a stepping stone to understanding the world and many of the new technologies being developed today. This course provides students with the fundamentals of Oscillations and Waves. Through in-class discussions, problem-solving sessions and the accompanying module in Experimental Physics you will have the opportunity to improve your ability to reason through challenging situations in the physical world using basic principles to develop appropriate solutions.
Assessment:
- Coursework (1 in-course test) 40%
- Quiz 25%
- Class participation 15%
- Poster presentation 20%

LEVEL: I
SEMESTER: II
COURSE CODE: PHYS 1215
COURSE TITLE: INTRODUCTORY PHYSICS LABORATORY II
NO. OF CREDITS: 1.5
PREREQUISITES: CAPE PHYSICS (UNITS I AND II) OR CAPE MATHEMATICS (UNITS I AND II) AND CSEC (CXC) PHYSICS OR PHYS 0070 AND PHYS 0071 OR THEIR EQUIVALENT
COURSE DESCRIPTION: Experimentation, observation and recording skills are very necessary for Physics. Experimental Physics is a modern, lab-based physics course where all the Year 1 students will be exposed to a variety of techniques, concepts and skills in the experimental sciences. These skills are needed for all the other components of the level 1 Physics courses and developed holistically through this course which entirely focuses on practical skills. This course is one of the six courses of Introductory Physics providing necessary background knowledge for Advanced Physics. There are practical exercises in topic areas of all the theory courses offered in Physics level 1.
Assessment:
Coursework 100%

LEVEL: I
SEMESTER: II
COURSE CODE: PHYS 1216
COURSE TITLE: INTRODUCTION TO OPTICS
NO. OF CREDITS: 1.5
PREREQUISITES: CAPE PHYSICS (UNITS I AND II) OR CAPE MATHEMATICS (UNITS I AND II) AND CSEC (CXC) PHYSICS OR PHYS 0070 AND PHYS 0071 OR THEIR EQUIVALENT
COURSE DESCRIPTION: This course is designed to introduce the student to topics in the fundamentals of Optics. Understanding Physics is crucial to the study of all sciences. Physics is the study of matter, energy, space and time and gaining a better understanding of this subject is a stepping stone to understanding the world and many of the new technologies being developed today. This course provides students with the fundamentals of Optics. Through in-class discussions, problem-solving sessions and the accompanying module in Experimental Physics you will have the opportunity to improve your ability to reason through challenging situations in the physical world using basic principles to develop appropriate solutions.
Assessment:
Final Examination (one 2-hr paper): 40%
Coursework: 60%
  - Quiz 25%
  - Class participation 15%
  - Poster presentation 20%
LEVEL: II
SEMESTER: 1
COURSE CODE: PHYS 2280
COURSE TITLE: MATHEMATICAL METHODS IN PHYSICS
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 OR PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
COURSE DESCRIPTION: Distribution functions, Sampling theory. Applications in Physics. Cartesian and Curvilinear Coordinate Systems. Vector analysis; Complex variable theory; Fourier series analysis; Differential equations, up to second order. Applications in Physics.
Assessment:
Theory Coursework 40%
One 2-hour Final Examination 60%

LEVEL: II
SEMESTER: 1
COURSE CODE: PHYS 2281
COURSE TITLE: MODERN PHYSICS I
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: II
SEMESTER: 2
COURSE CODE: PHYS 2282
COURSE TITLE: CIRCUIT THEORY AND ELECTRONICS
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1212
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: II
SEMESTER: 2
COURSE CODE: PHYS 2283
COURSE TITLE: OSCILLATIONS, WAVES AND OPTICS
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
COURSE DESCRIPTION: Oscillation and Waves: Simple, damped and forced harmonic motion. Equations of motion and their solutions. Different aspects and applications of these motions. Equation of wave motion in one dimension. Longitudinal and transverse waves and the consideration of different examples of the propagation and interaction of these waves. Interference Optics: Divided wave front and divided amplitude interference with examples and necessary background theory. Geometrical Optics: Imaging by optical systems; Thin lenses; Cardinal points; Matrix method for thick lens Systems; Aberrations
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework
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<tr>
<td>Course Code: PHYS 2290</td>
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<tr>
<td>Course Title: Introduction to Medical Physics and Bioengineering</td>
<td>Course Title: Meteorology, Climatology and Pollution</td>
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<tr>
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<td>Prerequisites: PHYS 1110 and PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 and PHYS 1216</td>
<td>Prerequisites: PHYS 1110 and PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 and PHYS 1216</td>
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<td><strong>Course Description:</strong> The structure, function, properties and physics of bone, muscles, cardiovascular system and the nervous system. Feedback and control systems in the body and homeostasis. Biomedical potentials, electro-oculogram, electrocardiogram, electromyogram, electroencephalogram and magnetocardiogram. The visual system and the auditory system.</td>
<td><strong>Course Description:</strong> Meteorology: Structure and composition of the atmosphere. Meteorological elements and measurements. Physical processes in the atmosphere. Atmosphere motion and circulation - Geostrophic wind, Gradient wind; Thermal wind, Frictional effects, vorticity. The general circulation, Frontal systems, Circulation and disturbances of the tropics. Climatology and Pollution: Climate controls, Classification, regional climates, Climates of the Caribbean. Land use, water resources, pollution. Aerosols. El Nino-Southern Oscillation. ITCZ.</td>
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<td><strong>Assessment:</strong> Theory Coursework 10%</td>
<td><strong>Assessment:</strong> Theory Coursework 10%</td>
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<td>Practical Coursework 30%</td>
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<td>One 2-hour Final Examination 60%</td>
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<tr>
<td>Course Code: PHYS 2291</td>
<td>Course Code: PHYS 2293</td>
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<tr>
<td>Course Title: Digital Electronics</td>
<td>Course Title: Fundamentals of Geophysics</td>
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<tr>
<td><strong>Course Description:</strong> Components and Devices: Basic theory and application of electronic and opto-electronic components such as zener diodes, SCR, LEDs, LDs, optical receivers, optical fibre. Digital electronics: Comparison of analogue and digital systems, Boolean Algebra, Basic logic functions NOT, AND, OR. Duality. Computational rules of logic algebra. Generalised logical system, inputs and outputs, variables, NAND, NOR, EXCLUSIVE OR, Combinational logical systems. Simplification of logical equations. KV tables up to four variables. Number system, codes, coding. Introduction to sequential systems.</td>
<td><strong>Course Description:</strong> Physics of the Earth: The geoid; Earth’s internal structure and origin; the Earth-Moon system, volcanoes. Earth’s magnetic field and its origin; paleo-magnetism. Terrestrial heat flow. Introduction to Geophysical Prospecting: A general survey of prospecting techniques with a brief account of relevant physical properties of rocks. Seismic, Gravity, Magnetic and Resistivity methods. Seismic digital data acquisition and processing will be introduced. Geophysical Interpretation.</td>
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<td><strong>Assessment:</strong> Theory Coursework 10%</td>
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<td>Practical Coursework 30%</td>
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<td>One 2-hour Final Examination 60%</td>
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LEVEL: II
SEMESTER: 1
COURSE CODE: PHYS 2294
COURSE TITLE: MATERIALS SCIENCE
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: II
SEMESTER: 2
COURSE CODE: PHYS 2295
COURSE TITLE: LASERS AND SOLAR ENERGY
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: III
SEMESTER: 2
COURSE CODE: PHYS 3381
COURSE TITLE: MODERN PHYSICS II
NUMBER OF CREDITS: 4
PREREQUISITE: PHYS 1110, PHYS 1111 AND PHYS 2280, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215, PHYS 1216 AND PHYS 2280
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: III
SEMESTER: 1
COURSE CODE: PHYS 3382
COURSE TITLE: ELECTRONICS & CONTROL THEORY
NUMBER OF CREDITS: 4
PREREQUISITE: PHYS 2282
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework
LEVEL: III
SEMESTER: 2
COURSE CODE: PHYS 3383
COURSE TITLE: OPTICS AND ASTRONOMY
NUMBER OF CREDITS: 4
PREREQUISITE:
PHYS 1110 AND PHYS 1111, OR PHYS 1211,
PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND
PHYS 1216
Course Description: Optics: Fraunhofer and Fresnel
diffraction and polarisation. Descriptive and quantitative
considerations, applications. Astronomy: Observational
instruments; celestial sphere and co-ordinate systems;
solar system; Astrobiology; Stars and their evolution;
Galaxies and cosmology.
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: III
SEMESTER: 2
COURSE CODE: PHYS 3384
COURSE TITLE: THERMODYNAMICS AND
SOLID STATE PHYSICS
NUMBER OF CREDITS: 4
PREREQUISITE:
PHYS 1110 AND PHYS 1111, OR PHYS 1211,
PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND
PHYS 1216
COURSE DESCRIPTION: Thermodynamics: Heat; work;
First and Second Laws of thermodynamics - applications;
engines; refrigerators; entropy; Maxwell’s relations;
Liquefaction of gases; Joule-Thomson effect;
thermodynamic potentials; magneto-thermal relations;
thermodynamic applications. Solid State: Structure of
solids; elementary crystallography and crystal diffraction;
free electron theory of metals; energy band theory;
semiconductors; superconductivity.
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework

LEVEL: III
SEMESTER: 1
COURSE CODE: PHYS 3385
COURSE TITLE: RESEARCH PROJECT
NUMBER OF CREDITS: 4
PREREQUISITE: AVAILABLE ONLY TO PHYSICS MAJORS
COURSE DESCRIPTION: A research project in some topic
in Physics or a related area and may include experimental
work in the laboratory and the field.
Assessment
A dissertation of up to 5000 words and an oral
presentation.
Dissertation Report 40%
Performance 40%
Oral Presentation 20%
LEVEL: III
SEMESTER: 1
COURSE CODE: PHYS 3390
COURSE TITLE: FURTHER MEDICAL PHYSICS AND BIOENGINEERING
NUMBER OF CREDITS: 4
PREREQUISITE:
PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework.

LEVEL: III
SEMESTER: 2
COURSE CODE: PHYS 3391
COURSE TITLE: FURTHER DIGITAL ELECTRONICS AND MICROPROCESSOR SYSTEMS
NUMBER OF CREDITS: 4
PREREQUISITES: PHYS 2291
Assessment:
Theory Coursework 10%
Practical Coursework 30%
One 2-hour Final Examination 60%
Students must pass coursework.
LEVEL: III  
SEMESTER: 2  
COURSE CODE: PHYS 3393  
COURSE TITLE: EARTH MATERIALS, EARTH PROCESSES AND SEISMOLOGY  
NUMBER OF CREDITS: 4  
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216  
COURSE DESCRIPTION: Earth Processes and Caribbean Stratigraphy: Properties of minerals and crystals; composition, occurrence, distribution, classification and field recognition of igneous, sedimentary and metamorphic rocks; tectonic and structural features of the earth; volcanic activity; formation of soils and sediments; stratigraphy and geologic time; plate tectonics. The Caribbean environment in relation to man, water supply, soils, petroleum, engineering geology, minerals.  
Introduction to Earth Materials: The origin, occurrence, world distribution and development of major earth resources - metalliferous and nonmetal ores, petroleum, coal building materials, chemical raw materials, bio mass resources. Earth Seismology: The nature of earthquakes; the propagation and detection of seismic waves; geographical distribution of earthquakes; surface effects of earthquakes, earthquake history of the Caribbean.  
Assessment:  
Theory Coursework 10%  
Practical Coursework 30%  
One 2-hour Final Examination 60%  
Students must pass coursework

LEVEL: III  
SEMESTER: 2  
COURSE CODE: PHYS 3394  
COURSE TITLE: FURTHER MATERIALS SCIENCE  
NUMBER OF CREDITS: 4  
PREREQUISITES: PHYS 2294  
Assessment:  
Theory Coursework 10%  
Practical Coursework 30%  
One 2-hour Final Examination 60%  
Students must pass coursework

LEVEL: III  
SEMESTER: 2  
COURSE CODE: PHYS 3395  
COURSE TITLE: THIN FILMS AND VACUUM PHYSICS  
NUMBER OF CREDITS: 4  
PREREQUISITES: PHYS 2294  
Assessment:  
Theory Coursework 10%  
Practical Coursework 30%  
One 2-hour Final Examination 60%  
Students must pass coursework

LEVEL: III  
SEMESTER: 1  
COURSE CODE: PHYS 3396  
COURSE TITLE: CERAMICS  
NUMBER OF CREDITS: 4  
PREREQUISITES: PHYS 1110 AND PHYS 1111, OR PHYS 1211, PHYS 1212, PHYS 1213, PHYS 1214, PHYS 1215 AND PHYS 1216  
COURSE DESCRIPTION: Typical properties and engineering applications; Crystal structures; Processing of Ceramics; Ceramic microstructures; Mechanical, thermal, electrical and magnetic properties; cements and concrete; Ceramic coating.  
Assessment:  
Theory Coursework 10%  
Practical Coursework 30%  
One 2-hour Final Examination 60%  
Students must pass coursework
## APPENDIX 1 - PRE-REQUISITES FOR CROSS FACULTY COURSES

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<th>FST B.SC. COMPUTER SCIENCE &amp; MANAGEMENT PREREQUISITES</th>
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APPENDIX 2 – APPROVED SCIENCE CAPE/GCE A-LEVEL SUBJECTS

- Applied Mathematics  
- Biology  
- Botany  
- Chemistry  
- Computer Science  
- Environmental Science  
- Further Mathematics  
- Geography  
- Geology  
- Information Technology  
- Mathematics  
- Pure Mathematics  
- Physics  
- Zoology
APPENDIX 3 – UNIVERSITY REGULATIONS ON PLAGIARISM

Application of these Regulations
1 These Regulations apply to the presentation of work by a student for evaluation, whether or not for credit, but do not apply to invigilated written examinations.

Definition of plagiarism
2 In these Regulations, “plagiarism” means the unacknowledged and unjustified use of the words, ideas or creations of another, including unjustified unacknowledged quotation and unjustified unattributed borrowing;

“Level 1 plagiarism” means plagiarism which does not meet the definition of Level 2 plagiarism;

“Level 2 plagiarism” means plagiarism undertaken with the intention of passing off as original work by the plagiariser work done by another person or persons.

3 What may otherwise meet the definition of plagiarism may be justified for the purposes of Regulation 2 where the particular unacknowledged use of the words, ideas and creations of another is by the standards of the relevant academic discipline a function of part or all of the object of the work for evaluation whether or not for credit, for example:
   a. The unacknowledged use is required for conformity with presentation standards;
   b. The task set or undertaken is one of translation of the work of another into a different language or format;
   c. The task set or undertaken requires producing a result by teamwork for joint credit regardless of the level of individual contribution;
   d. The task set or undertaken requires extensive adaptation of models within a time period of such brevity as to exclude extensive attribution;
   e. The task set or undertaken requires the use of an artificial language, such as is the case with computer programming, where the use of unoriginal verbal formulae is essential.

4 It is not a justification under Regulations 2 and 3 for the unacknowledged use of the words, ideas and creations of another that the user enjoys the right of use of those words, ideas and creations as a matter of intellectual property.

Other definitions
5 In these Regulations, “Chairman” means the Chairman of the relevant Campus Committee on Examinations;
   “Examination Regulations” means the Examination and other forms of Assessment Regulations for First Degrees Associate Degrees Diplomas and Certificates of the University;
   “set of facts” means a fact or combination of facts.

Evidence of plagiarism
6 In order to constitute evidence of plagiarism under these Regulations, there shall be identified as a minimum the passage or passages in the student’s work which are considered to have been plagiarised and the passage or passages from which the passages in the student’s work are considered to have been taken.

Student Statement on Plagiarism
7 When a student submits for examination work under Regulation 1, the student shall sign a statement, in such form as the Campus Registrar may prescribe, that as far as possible the work submitted is free of plagiarism including unattributed quotation or paraphrase of the work of another except where justified under Regulation 3.

8 Quotation or paraphrase is attributed for the purpose of Regulation 7 if the writer has indicated using conventions appropriate to the discipline that the work is not the writer’s own.

9 The University is not prohibited from proceeding with a charge of plagiarism where there is no statement as prescribed under Regulation 7.

Electronic vetting for plagiarism
10 The results of any electronic vetting although capable, where the requirements of Regulation 7 are satisfied, of constituting evidence under these Regulations, are not thereby conclusive of any question as to whether or not plagiarism exists.

Level 1 plagiarism
11 In work submitted for examination where the Examiner is satisfied that Level 1 plagiarism has been committed, he/she shall penalise the student by reducing the mark which would have otherwise been awarded taking into account any relevant Faculty regulations.
Level 2 plagiarism

12 Where an examiner has evidence of Level 2 plagiarism in the material being examined, that examiner shall report it to the Head of Department or the Dean and may at any time provide the Registrar with a copy of that report. In cases where the examiner and the Dean are one and the same, the report shall be referred to the Head of the Department and also to the Campus Registrar.

13 Where any other person who in the course of duty sees material being examined which he or she believes is evidence of Level 2 plagiarism that other person may report it to the Head of Department or the Dean and may at any time report it to the Campus Registrar who shall take such action as may be appropriate.

14 Where a Dean or Head of Department receives a report either under Regulation 12 or 13, the Dean or Head of Department, as the case may be, shall
   a. where in concurrence with the report’s identification of evidence of Level 2 plagiarism, report the matter to the Campus Registrar; or
   b. where not concurring in the identification of evidence of plagiarism, reply to the examiner declining to proceed further on the report; or
   c. where concluding that there is evidence of Level 1 plagiarism, reply to the examiner indicating that conclusion and the Examiner shall proceed as under Regulation 11.

15 Where a report is made to the Campus Registrar under Regulation 14a or 16, the Campus Registrar shall lay a charge and refer the matter to the Campus Committee on Examinations.

16 Where the Campus Registrar receives a report alleging Level 2 plagiarism from the Examiner or any other person except the Dean or Head of Department, the Campus Registrar shall refer the matter to a senior academic to determine whether there is sufficient evidence to ground a charge of plagiarism and where such evidence is found, the Campus Registrar shall proceed as under Regulation 15.

17 Where the matter has been referred to the Campus Committee on Examinations pursuant to Regulation 15, the proceedings under these Regulations prevail, over any other disciplinary proceedings within the University initiated against the student based on the same facts and, without prejudice to Regulation 21, any other such disciplinary proceedings shall be stayed, subject to being reopened.

18 If the Campus Committee on Examinations is satisfied, after holding a hearing, that the student has committed Level 2 plagiarism, it shall in making a determination on the severity of the penalty take into consideration:
   a. the circumstances of the particular case;
   b. the seniority of the student; and
   c. whether this is the first or a repeated incidence of Level 2 plagiarism.

19 Where the Campus Committee is of the view that the appropriate penalty for an offence of Level 2 plagiarism is for the student to be:
   (i) awarded a fail mark;
   (ii) excluded from some or all further examinations of the University for such period as it may determine;
   (iii) be dismissed from the University,
   it shall make such recommendation to the Academic Board.

Clearance on a charge of Level 2 plagiarism

20 A determination of the Campus Committee on Examinations that Level 2 plagiarism has not been found will be reported to the Campus Registrar who shall refer it to the Examiner and notify the student. Where the Committee has not identified Level 2 but has identified Level 1, it shall be reported to the Campus Registrar who shall refer it to the examiner.

Level 2 plagiarism: Appeal to the Senate

21 A student may appeal to the Senate from any decision against him or her on a charge of plagiarism made by Academic Board.

Delegation by Dean or Head of Department

22 The Dean or Head of Department, as the case may be, may generally or in a particular instance delegate that officer’s functions under these Regulations.

Conflict of interest disqualification

23 Any person who has at any time been an examiner of work or been involved in procedures for laying charges in relation to which an issue of plagiarism is being considered under these Regulations shall withdraw from performing any functions under these Regulations other than those of supervisor and examiner.
PLAGIARISM DECLARATION

THE UNIVERSITY OF THE WEST INDIES
The Office of the Board for Undergraduate Studies
INDIVIDUAL PLAGIARISM DECLARATION

STUDENT ID:

COURSE TITLE:

COURSE CODE:

TITLE OF ASSIGNMENT:

This declaration is being made in accordance with the University Regulations on Plagiarism (First Degrees, Diplomas and Certificates) and must be attached to all work, submitted by a student to be assessed in partial or complete fulfilment of the course requirement(s), other than work submitted in an invigilated examination.

STATEMENT
1. I have read the Plagiarism Regulations as set out in the Faculty or Open Campus Student Handbook and on University websites related to the submission of coursework for assessment.

2. I declare that I understand that plagiarism is a serious academic offence for which the University may impose severe penalties.

3. I declare that the submitted work indicated above is my own work, except where duly acknowledged and referenced and does not contain any plagiarized material.

4. I also declare that this work has not been previously submitted for credit either in its entirety or in part within the UWI or elsewhere. Where work was previously submitted, permission has been granted by my Supervisor/Lecturer/Instructor as reflected by the attached Accountability Statement.

5. I understand that I may be required to submit the work in electronic form and accept that the University may subject the work to a computer-based similarity detention service.

NAME __________________________________________________________________________

SIGNATURE ___________________________________________________________________

DATE __________________________________________________________________________
GROUP PLAGIARISM DECLARATION

COURSE TITLE:

COURSE CODE:

TITLE OF ASSIGNMENT:

When submitting a group assignment for assessment each member of the group will be required to sign the following declaration of ownership which will appear on the coursework submission sheet.

We the undersigned declare that:

1. We have read the Plagiarism Regulations as set out in the Faculty or Open Campus Student Handbook and on University websites related to the submission of coursework for assessment.

2. We declare that I understand that plagiarism is a serious academic offence for which the University may impose severe penalties.

3. The submitted work indicated above is our own work, except where duly acknowledged and referenced.

4. This work has not been previously submitted for credit either in its entirety or in part within the UWI or elsewhere. Where work was previously submitted, permission has been granted by our Supervisor/Lecturer/Instructor as reflected by the attached Accountability Statement.

5. We understand that we may be required to submit the work in electronic form and accept that the University may check the originality of the work using a computer-based similarity detection service.

NAME ________________________________________________________________________
SIGNATURE ______________________________________________________________________

NAME ________________________________________________________________________
SIGNATURE ______________________________________________________________________

NAME ________________________________________________________________________
SIGNATURE ______________________________________________________________________

DATE _________________________________________________________________________
ADDITIONAL ACCOUNTABILITY STATEMENT WHERE WORK HAS BEEN PREVIOUSLY SUBMITTED

1. I/We have set out in an attached statement the details regarding the circumstances under which this paper or parts thereof has been previously submitted.

2. I/We have received written permission from my Supervisor/Lecturer/Instructor regarding the submission of this paper and I have attached a copy of that written permission to this statement.

3. I/We hereby declare that the submission of this paper is in keeping with the permission granted.

NAME ________________________________________________________________

SIGNATURE ____________________________________________________________

DATE _________________________________________________________________
## APPENDIX 4 – LIST OF ANTI-REQUISITES

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