



**CATHOLIC UNIVERSITY INSTITUTE OF BUEA
(CUIB)**

THE ENTREPRENEURIAL UNIVERSITY



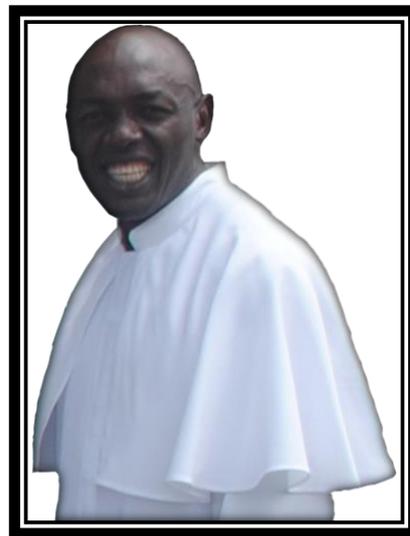
**STUDENTS' HANDBOOK
BSC. DEGREES
2018**

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MESSAGE FROM THE PRESIDENT

My happy Duty as President of The Catholic University Institute of Buea (CUIB), **The Entrepreneurial University** is to thank the Group that has worked hard to produce this Second Edition of our Schools' Handbook. Our goal as a University has been to prepare a kind of executive Students' handbook or **vade-mecum** that is not only meant to enhance our student learning and experience but also to help all our partners and stakeholders to understand our unique mission and identity as an Entrepreneurial University based on the Focolare's Economy of Communion (EoC) philosophy. The EoC is a community of approximately 800 businesses world-wide that fosters a "culture of giving" within business so as to humanise the economy. By emphasising Catholic Studies in our core curriculum and EoC in our Entrepreneurial curriculum, we in CUIB have attempted to institutionalise a unique and distinctively Catholic Entrepreneurial University by fostering a socially and spiritually-based understanding of sound entrepreneurial skills, techniques and practices. This has not been an easy task especially as such a model is so new not only to our immediate environment but to the Cameroon Nation in particular and the African Continent at large.



I congratulate the Provost, Prof. Ndongko Wilfred and his immediate collaborators who have worked hard to make this dream come true. My special thanks go to the entire School of Information Technology family for their dedication and selflessness to help bring to fruition our vision for a vade mecum for our students in the School of Business.

The reader going through this handbook will notice that two things stand out – our 'Both/And Culture' versus 'Either/Or' and conflict-driven-profit or social impact, poor against rich and our entrepreneurial culture which runs through the academic heartland of all our schools. In CUIB, we emphasise both the **Heart and Soul** of our Entrepreneurial Education. The heart of our Entrepreneurial education is that we train our students to be academically competent in their areas of specialisation acquiring the right skills and techniques that are necessary for them to face a very competitive society. For instance, the needed skills within business of; reading a balance sheet, calculating cost of capital, providing statistical analysis, targeting and segmenting markets, managing group dynamics, generating creative thinking, mediating conflicts and so forth are imperative in CUIB. However, while such skills and techniques are important, (the matter of Entrepreneurial education), they are insufficient as they do not move students to an "Economy of Communion" which has the ability to foster not just economic development, but "integral human development". In our country, we continue to see and hear stories of corruption and misappropriation of funds meant for the common good. We continue to see and hear stories of Banks starting off well and collapsing because someone embezzled all the money. A true and genuine Entrepreneurial Education must also foster spiritual and moral values. The proper conduct of an entrepreneur is informed by his or her ethics, character and worldview. That is why in CUIB our curriculum is designed also to develop a moral compass that will enable our students to find the right solutions even when in uncharted territory and also address the ethical and economic challenges which they face

every day in a coherent way. We think that this is the way forward for our nation if we have to effectively achieve **Vision2035** of our current President Paul Biya. This approach that CUIB has adopted is truly the Catholic approach to life. It is not an either/or approach that enables the winner to take it all but an approach which is meant to be win-win. In CUIB it is about Faith and Reason, Spirituality and Work, prayer and hard work (study), vocation and business, leisure and study. This is what our Catholic faith teaches us. Think of the Eucharist where we have at the same time the Body and Blood of our Lord Jesus Christ, but also bread and wine. Is this an either/or situation? At first glance these seem to be mutually exclusive states, but with the eye and reason of our faith, it becomes a wonderful both/and. What is perceived to be opposed becomes a beautiful and complementary unity. In CUIB we have used this ancient insight of our mother Church and apply it to teaching, research and practice. In CUIB, we have what is called the “EoC hour”. This hour begins with the celebration of the Holy Mass at midday, the greatest act of communion. From 12.30 -1,30 pm EoC is reserved for sharing, meditation, ritual celebrations, conferences, birthdays, EoC base Group Work, tutoring, inspirational talks etc. Our interactions in the University; be they economic, civic, or personal, are not aimed at winner-takes-all, but at win/win collaboration.

Another important aspect that the reader of this Students’ Handbook will clearly appreciate is the fact that our entrepreneurial programs run through the academic heartland, that is, all the schools. Developing an entrepreneurial mind-set and taking the risk in doing business through the University’s Research and Business arm known as CUIB Centre for Entrepreneurship, Research and Innovation are the pathways that we have adopted in CUIB. It is my hope that this handbook will go a long way to foster this unique Catholic and Entrepreneurial Culture.

Ad multos annos!!!

God bless you.

In Jesus and Mary,

Fr. George Nkeze Jingwa (Edd)

President, CUIB



FOREWORD BY THE PROVOST

I am delighted to introduce the Second Edition of the School of Information Technology CUIB Students' Handbook. The handbook provides essential information about the activities of the school, which all students in the School or prospective students need to have.

The School of Information Technology, CUIB which has been in existence since 2010 is a Centre of Excellence for the production of highly competent, effective and efficient Business graduates to meet the man power needs of the nation in business and other related sectors.

All students on admission must register properly in their respective Departments. The procedures for Departmental registration are detailed in the Handbook of the School. It is therefore important that students have a copy of the School Handbook for detailed information about the procedures for registration, and other activities of the School. Screening of credentials is done at least two times before a student graduates; usually in the first year and in the final year. You must be ready to submit your original credentials for screening at the appropriate time, when the University calls for them.

The essential facilities needed by the students to pursue their academic careers peacefully and successfully are available in the University. You must attend lectures regularly and promptly, do all your assignments and submit them before the expiration of the deadlines given by your Lecturers; make the best use of the library and stay focused on your studies in order to actualize your academic ambitions. There are Academic Advisers in the Departments, whose responsibilities include guiding and counseling students in matters relating to their academic Programme. You should not hesitate to approach your Academic Advisers on any question or problem you may encounter about your academic work for necessary guidance.

The Minimum Graduation Requirements for each Programme in the School of Information Technology have been spelt out. This relates to the minimum number of foundation courses and core courses to be taken together with the minimum credit value. Upon graduation, students are expected to have validated all General University Courses, minimum required electives and other departmental requirements. Students are also expected to put in at least 100hours for volunteerism. In other to meet these requirements, you need to work hard, pray hard so that at the end, you will be found worthy both in character and in training to be awarded the Degree of Bachelor of Science by the University.

I wish you success in your academic pursuits.

Prof. Wilfred A. NDONGKO
Provost

INTRODUCTION

The purpose of this Handbook is to accompany students in their academic/professional pursuit of knowledge in the School of Information Technology by clearly specifying the vision, mission, and objectives of the School along with possible career opportunities. The School of Information Technology offers a broad range of courses leading to the award of a Bachelor of Science degree in one of the following departments: Software Engineering; Cyber Security; Computer Networks and Telecommunication Systems or an Associate of Science in the following: Web Design and Programming; Information Security.



The learning processes focus on the interdisciplinary values and professional qualities relevant in the growing and ever-changing field of Information Technology. The School also offers certification courses (OCA, Comptia Security+ among others) which are embedded in the curriculum of studies. In line with the entrepreneurial spirit of the university, the School of IT is divided into two arms:

- The teaching and formation arm headed by the Dean in collaboration with the Special Assistant to the Dean.
- The practical arm headed by the Coordinator for Entrepreneurial projects under the framework of the university's Center for Entrepreneurship, Research and Innovation (CUIB-CERI).

This Handbook contains a statement of the vision, mission and objectives of the School as well as the admission requirements. It contains a list of the School's faculty and staff, registration procedures, a description of the academic program including possible career paths. The graduation requirements are clearly specified as well as the list of courses with brief descriptions.

It is our hope that the book will be a true companion to enhance your stay in CUIB.

Dr. Felicitas Mokom
Dean-SIT

BRIEF HISTORY OF THE SCHOOL OF INFORMATION TECHNOLOGY (SIT)

The School of Information Technology was created as one of the four Schools that took off upon the creation of CUIB in May 2010. We are particularly proud of our pioneer head of School, *Mr. Azeyeh Xavier*, for the outstanding courage required for the take-off of such a reputable School, which is entering its sixth year, come October 2015.

Being a primal School in a Catholic Entrepreneurial University, the School of IT strives to integrate technology into the social, economic, spiritual, cultural and environmental lives of its students, staff and faculty. In accordance with the University's policies, the nomenclature adopted for academic levels as well as offices follows the American system. Thus first year students are referred to as *Freshmen*, second year – *Sophomore*, third year – *Junior* and fourth year – *Senior*. The enrollment of the school has been steadily on the rise. About 20% of the students are female and less than 10% are foreign students.

SIT sticks to high standards and control in its teaching and conduct of examination. Examination questions are vetted internally by the School and externally by the mentor university, the University of Buea thereby ensuring quality and relevance. The students of the School have been making remarkable attempts to engage in the concept of Entrepreneurship and Economy of Communion (EoC) as evident in the several projects that have been undertaken by different student groups.

I. SCHOOL of IT's PHILOSOPHY:

The academic philosophy of the School of IT, falls within the six key pillars of the Academic Philosophy of CUIB which are: Spiritual and Moral values, Entrepreneurial spirit, Scientific and Technical Know-how, Social, Environmental awareness and responsibility, Integrated education for life, Economy of Communion (EoC).

A major guiding philosophy of the School of IT is blending students acquiring a high level of theoretical and practical exercises together with a strong emphasis on spiritual and moral well-being.

II. VISION:

The vision of this school is to serve the community with quality IT services through participatory teaching, learning, research and development of Students, Staff and Faculty.

III. MISSION:

Through the integration of academic practices and Catholic teachings, we train focused IT professionals for services to their communities who are capable of responding to societal, technological, economic and global challenges.

IV. OBJECTIVES

The School of IT in CUIB is centered on:

- i. The training and formation of Information Technologists with a broad horizon, bursting with ideas to build the future of their immediate locality as well as that of the global community.
- ii. The active engagement in developing partnership with all providers and consumers of a wide range of IT services and products.
- iii. The training of graduates who will utilize their diverse acquired skills and resourcefulness to invent, design and realize course effective technology to meet local needs, to find creative and innovative solutions to Information Technology problems in Cameroon and beyond.
- iv. The training of graduates who will embrace cultural, societal, environmental and ethical issues in their work through our volunteerism, catholic education, entrepreneurship and civic education programs.
- v. The training of students to ensure excellence in multi-disciplinary and multi-cultural teams, who will demonstrate leadership skills and effective communication in their place of work.

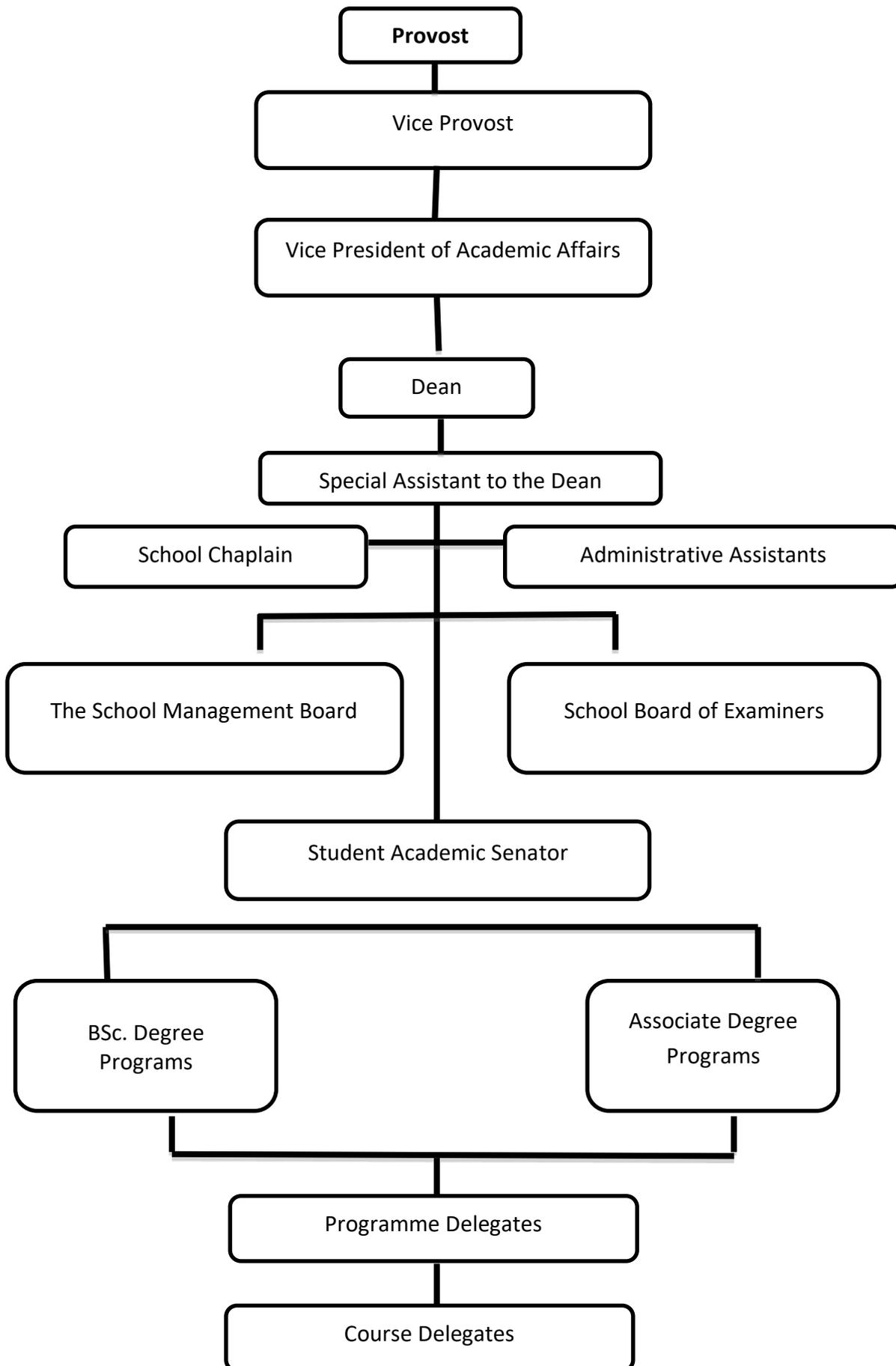
V. ADMINISTRATIVE STRUCTURE

Being part of a relatively young university, the School of IT has a simple administrative structure comprising of the Dean, Special Assistant to the Dean, Administrative Assistants, School Senator, Programme Delegates and Course Delegates. The School of IT is headed by the Dean, the Special Assistant to the Dean, Administrative Assistants and a School Chaplain who handle the smooth operation of the Schools.

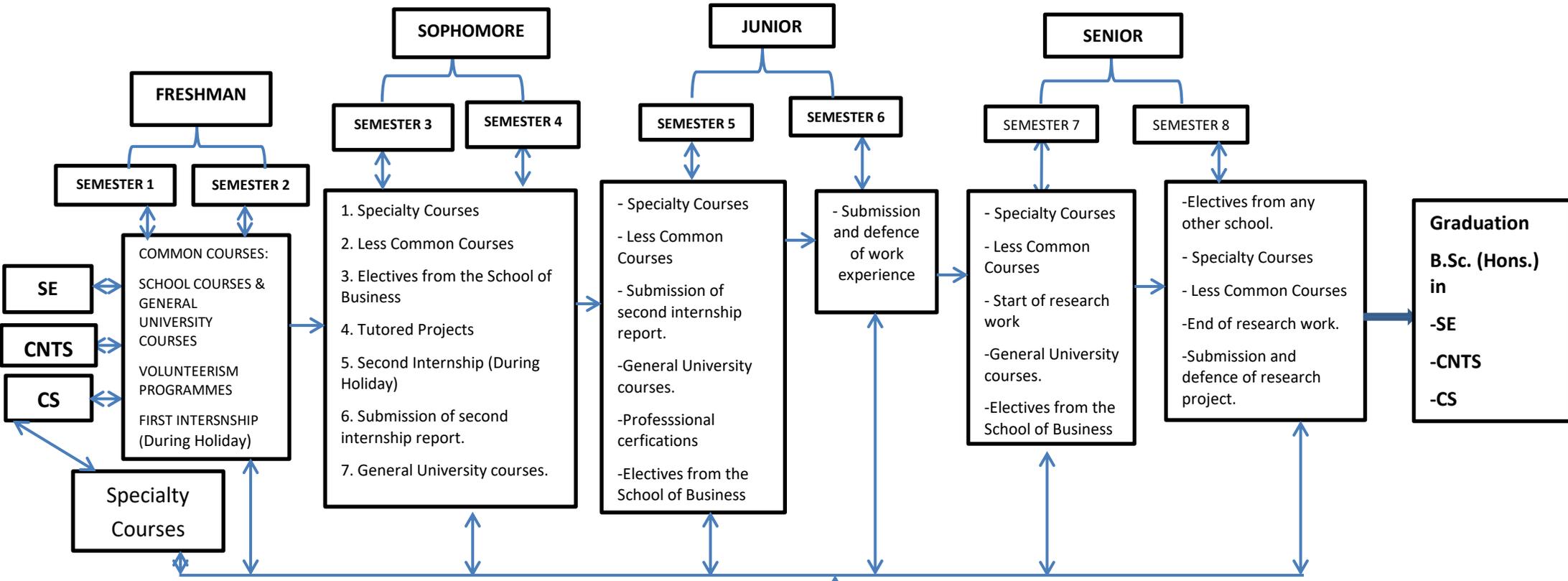
There is a Board of Examiners comprising of faculty of the School. The Board meets at appointed time based on the school calendar or summoned by the Dean to review or vet examination questions, consider or approve examination results. Faculty can also meet as need arises to share teaching experiences and to review/plan important school activities.

There is a School Management Board charged with managing the operations of the School. The responsibilities include: design and update program offered in the School, process applications and hire faculty, evaluate faculty for promotion and appointment, draw up the School's budget and approve expenses, approve capital expenses, approve payment of Adjunct Faculty and extra hours for Full Time. It is comprised of seven (7) members as follows: President or representative (chairman), Provost or representative (member), Dean (executive officer), two IT Faculty (members), CUIB Comptroller and Finance officer of IT The Board meets monthly.

Administrative structure (School of IT)



SCHOOL OF INFORMATION TECHNOLOGY ACADEMIC AND CURRICULUM MAP



Legend

SE = SOFTWARE ENGINEERING

CNTS = COMPUTER NETWORK AND TELECOMMUNICATION SYSTEM

CS =CYBER SECURITY

Tutored Projects

Every Sophomore students is expected to carry out an IT related project. This project would be monitored by a tutor and presented to a panel.

Work Experience

Each Junior Year Student is expected to complete 10 Weeks of work, experience in IT related firm or department, And defend a detailed report of the work experience.

General Activities

- Volunteerism
- Job market preparation
- Field Visit
- Seminars, Conferences, Workshops

VI. STAFFING

SN	Names	Status	Qualification
1	Dr. Felicitas Mokom	Dean	PhD - Computer Science
2	Mr. Gilemond Nchiwo	Special Assistant to the Dean	M.Eng. – Computer Networks
3	Miss. Tiako Fani Michele	Full-Time Faculty	M.Sc - Computer Science
4	Mr. Ngatchu Damen	Full-Time Faculty	M.Eng. – Computing Machines, Complexes, Systems and Networks
5	Mr. Achankeng Peter	Full-Time Faculty	M.Sc – Physics
6	Mr. Nfongang Eric	Adjunct Faculty	M.Sc. – Information Technology
7	Mr. Yannick Yoppa Ngaha	Adjunct Faculty	M.Eng. – Computer Networks and Telecommunications
8	Mr. Nkemeni Valery	Adjunct Faculty	M.Eng. – Telecommunications
9	Dr. Ndambomve Patrice	Adjunct Faculty	PhD. - Mathematics
10	Dr. Divine Anye	Adjunct Faculty	PhD. – Cyber Security
11	Mr. Bisong Emmanuel	Adjunct Faculty	MEng. – Computer Networks and Telecommunications

VII. ADMISSION REQUIREMENTS AND DURATION OF STUDY PROGRAMS:

a. Admission Requirement

CUIB insists on two principles regarding admissions:

- i) **Vocational Competence**: Students should have a vocation or love for what they intend to study. Such vocational call may be subject to a thorough show of proof.
- ii) **Academic Competence**:
 - The applicant needs to have passed at least **4 subjects** in the **Ordinary “O” Level examination** and **2 subjects** at the **Advanced “A” Level Examination** in one sitting.
 - Other approved certificates include a valid Baccalaureate Certificate and any other proof of High School Education, recognized by the University's Senate.

- Students with foreign certificates **must** obtain an equivalent from the Ministry of Higher Education.
- A pass grade in either mathematics or physics or related subject in either the Ordinary level or Advanced Level or any equivalent certificates is recommended but not obligatory for admissions into the School of IT.
- Applicants with a non-English background will need to show proof of the fact that they can take courses in English; otherwise, they would be required to do an English Proficiency Test in the University.
- Applicants holding a higher national diploma might be exempted from certain courses following detailed studies of their files by the prospective departments.

b. Duration of Study Programmes

The School of IT offers a Four years (Honors) Bachelor program. Students who are exempted from certain courses upon admissions must however spend a minimum of five semesters in the university before graduation.

VIII. PROFICIENCY IN ENGLISH AND FRENCH

1. PROFICIENCY IN ENGLISH

The Catholic University Institute of Buea (CUIB), admits students from diverse language backgrounds. Candidates with a non-English Language background must however, show proof of their English Language proficiency, since English is the language of instruction at CUIB. Proof of language proficiency could be accomplished in the following ways:

- ❖ Potential students can present to the University, an Attestation of English Language Proficiency from a recognized institution
- ❖ Students who do not have the English Language Proficiency Attestation will be given the following options through which they can acquire this at CUIB Language and study abroad center:
 - i. Students may be required to take an **English Placement Test** at the beginning to ascertain their level of English Proficiency.
 - ii. They will be assigned to classes depending on their levels.
 - iii. Students will write an examination at the end of the course and successful candidates will be issued an **Attestation of English Language Proficiency**.

Students who wish to be fluent in the English Language have the privilege to continue with their classes.

2. PROFICIENCY IN FRENCH

Considering the fact that Cameroon is a Bilingual Country, i.e. **English and French**, the Catholic University Institute of Buea (CUIB) wish that their young entrepreneurs graduate as Bilingual Citizens. Therefore, the CUIB Language and study abroad center will organize classes for students without a French Language background. Entry requirements will follow same procedure as English Language Proficiency.

3. TOEFL GRE AND GMAT EXAMINATIONS

The CUIB Language and study abroad center will assist students who want to take internationally approved exams to enhance their preparedness for Graduate Admission in the United States of America. Among these will include:

- **TOEFL** - Test of English as a Foreign Language.
- **GRE** - Graduate Record Exams.

- **GMAT** - Graduate Management Assessment Test.

For registration procedures, please contact the Office of the Provost.

IX. REGISTRATION PROCEDURES

- Present Original of fee payment from bank, along with two copies to the Finance Office.
- Both copies will be marked and stamped by the account receivable person. A copy of the stamped document will be given to the student.
- Present this copy to the School, and obtain an Online Course Registration (OCR) Code.
- After completing the online registration, print three (3) copies of Form A2 and present these for signature, together with the certified copies of your academic certificates and Birth Certificate for verification. These should be put in a hard folder.
- Collect a signed and stamped copy of your Form A2.
- Keep and guard your CUIB documents (Receipts, Form A2, ID card, etc) very jealously.

Some registration policies

Students have a maximum of 7 courses per semester and 8 per semester for the cyber security program. In the case where courses are to be carried over, the student is allowed to do so for a maximum of 8 credits per semester alongside with the current year courses. If the student has more than 8 credits to carry over, the courses concerned should be carried over and registered as they will have priority over the current year courses. The student can therefore register for some courses of the current year in addition, hereby considering a maximum of 10 courses to register for in a given semester.

X. ACADEMIC PROGRAMME

The School of IT offers a Four-Year Degree Programme, which goes a long way to prepare the students morally, educationally and holistically for the award of the Bachelor of Science (B.Sc) Degree.

The courses are designed to provide effective and regular contact hours between the students and the facilitators. The latter are seasoned lecturers of repute who have studied in many parts of the world. The students are hereby exposed to a wide variety of socio-cultural, technological and academic backgrounds, necessary for the growing Information Technologist.

The programmes are characterized by: **Internships, Hands-on Project, Entrepreneurial Projects, Volunteerism Schemes, Base Group Work, Certification Programmes, and Pastoral Activities.**

All these work in line with the EoC Philosophy of the entire CUIB community which is clearly articulated in the University Guide and Calendar of Activities for the Academic year.

i. Internships

The internship represents a structured experience that allows the student to integrate and apply the theory, skills, and attitudes in a work environment. It enables students to demonstrate professional and ethical behavior, to prepare and analyze the community and to develop a project which benefits the community. Each student is placed within an organization in accordance with his/her learning interests, in an environment that fits with the student's professional objectives.

At the end of each internship experience the student prepares a presentation or report to help him/her examine and evaluate the internship experiences. The report offers the student an opportunity to reflect back on his/her experiences acquired; and on how he/she has changed, as a result of the internship. Internship opportunities allow students to increase their knowledge, problem-solving ability, ability to understand people in a work setting, as well as gain some other significant personal

growth. Internship may include experiences such as: Field Experience, Field Trips, Practicum, and Holiday Internship.

At the end of the Freshman Year during the long holidays, students are expected to carry out internship in any company of their choice which constitutes 4 credits. At the end of the Sophomore Year, similar experience is expected of students which constitute 8 credits. The Industrial Placement during the second semester of the Junior Year constitutes 26 credits.

ii. **Hands-on Project**

Every year, students are encouraged to be part of a hands-on project, either of their making or an ongoing school project. The second semester of the Sophomore Year is characterized by the SIT 208 course titled Tutored project. During this course, students carry out long working sessions to complete a project which they defend as the assessment for the course. Most Junior and Senior Year courses are project based.

iii. **Entrepreneurial Projects**

Through a number of courses, the entrepreneurial project helps the student to develop the aptitude and an attitude for business, by integrating the technical, economic, environmental, and social aspects of business management. At the end of the courses the student is able to create his or her own business in a sustainable manner. To achieve these objectives, the student participates in the planning and application of feasibility studies, including the business aspects of marketing, administration, budgeting, finances, and social and environmental impacts of the CUIB-CERI annual trade/academic Fair. As an essential part of the project, the student uses an experiential learning technique whereby he/she works with a team to organize a business, analyze and evaluate problems, make decisions, carry out field work, and scrutinize the performance of his/her business.

This is a long-term course. The course begins in the Freshman Year and concludes in the second semester of the Junior Year. Throughout the three years of the course, the students learn piece by piece the information that is instrumental for the formation of a successful project. The courses serve as support and training that supplements the work that the student is carrying out in his/her entrepreneurial project. More information on entrepreneurial project can be obtained from the CUIB-CERI office.

iv. **Professional Wears**

The School of IT uses two overalls jackets (Brown and White) for its professional wear. The Brown is recommended for hands-on practical sessions that may involve working in a dusty environment while the White is recommended for working in the soft-lab. Students are expected to come to school in their professional wear every Monday and Thursday.

XI. THE CATHOLIC UNIVERSITY INSTITUTE OF BUEA VOLUNTEER NETWORK PROGRAM (CUIB-VNP)

CUIB-VN Motto: *“Encouraging Community Involvement and Service”*

i. **Purpose:** The purpose of the CUIB Volunteer Network Program (CUIB-VNP) is to encourage students’ community engagement and service. The CUIB-VNP recognizes and understands the civic and social challenges of our local and national communities. Our philosophy is grounded in the commitment of a lifelong ethic of service following the mission of CUIB: *“to prepare professional servant leaders with moral and spiritual values to contribute to the sustainable development of their communities”*.

ii. **Aims and Objectives:** The CUIB-VNP helps to:

1.) Identify service opportunities and activities for students in Buea and the surrounding communities in which the various CUIB campuses are located. The service opportunities and

activities enable students to fulfill one of the general criterion for graduation (100 hours of Volunteerism).

- 2.) Coordinate events and services throughout the school year to address community needs and to educate about social issues.
- 3.) Create opportunities for students to experience social change and servant leadership in action.
- 4.) Understand social-justice issues and the need for both individual and systemic change to make a positive impact in communities.
- 5.) Support student-led initiatives to address community needs.
- 6.) Enable students to realize that community service experiences can and should complement academic coursework (Service – Learning).
- 7.) Promote orientation, training, and reflection in every service experience.

The CUIB Volunteer Network Program (How it Works!)

Volunteer Coordinators and Facilitators will work with volunteer communities or agencies to identify individual and group service opportunities that suit students’ interest and skills.

Getting Started

Students or student groups interested in particular community services shall contact the Volunteer Coordinators and Facilitators, who shall assist them in recording their volunteer hours.

To get started, identify CUIB Volunteer opportunities and activities, **and obtain** the volunteer Form from the School of IT. Students are advised to check out weekly or monthly volunteering opportunities through the Volunteer Calendar at the School of IT.

SUGGESTED LIST OF GENERAL VOLUNTEERING OPPORTUNITIES

1. Campus attraction and Animation.
2. CUIB community – Learning Engagement Forums

XII. COURSE ASSESSMENT AND GRADING SYSTEM

i. Course Evaluation System in CUIB

In CUIB, course evaluation has two main components: Continuous Assessments (CA) and Examinations. There has been significant review of the course evaluation system in CUIB to meet its mission and identity as a professional university with an Entrepreneurial culture. It began with the traditional 30% and 70% for CA and Exam respectively. Because this system is more content oriented, a 40% CA – 60% exam was introduced. However, to achieve a very balanced and authentic assessment of students learning that considers knowledge acquisition, and other skills needed by the student to face the challenges of the real world, a 50% CA and 50% exams ratio has been put in place as shown in the table below.

Main component	Minor component	Mark allocation
Continuous Assessment	Class attendance and participation	10
	One or Two standardized test(s)	20
	Base group work	10
	Portfolio of student’s work	10
CA total		50
Examination	End of semester examination	50
Total		100

For more information see CUIB 2013/2014 Bulletin on the CUIB Assessment philosophy and Model.

The grading system for courses as well as the entire degree program runs on a scale from 4.00 through to 0.00. A student might be granted an incomplete grade if he or she request for such a grade with documented evidence to justify the request. In such a case, the student is given the opportunity to complete the course at a later time. Students can either earn a pass, fail or withdrawal grade in courses with zero credit values which are required for graduation. A course is considered validated when an overall score of 50% or more is obtained. A student must score a grade point of 2.00 or more to earn credits for a given course. Table 2 presents a summary of the grading system within the school.

ii. Grading system

Courses can be graded in two ways: by percentage and by grade points. In terms of percentage, a course is considered pass when a score of 50% or more is obtained. Based on grade points, the grading system for a course as well as the entire degree program runs on a scale of 4.00 (A grade) through to 0.00 (F grade). Table 2 presents a summary of the course evaluation/grading. For individual courses, this scale includes options such as Incomplete, Withdrawal, Pass and Fail. A student must score a grade point of 2.00 or more to earn the allotted credits for a given course.

<i>Total marks earned /100</i>	<i>Grade</i>	<i>Grade Point</i>	<i>Evaluation</i>
80 – 100	A	4.00	Excellent
70 – 79	B+	3.50	Very Good
60 – 69	B	3.00	Good
55 – 59	C+	2.50	Fair
50 – 54	C	2.00	Average
45 – 49	D+	1.50	Below Average
40 – 44	D	1.00	Poor
00 – 39	F	0.00	Fail
	I		Incomplete

Classification of Degree

In order to be considered for a degree, a student must have completed all elements of assessment for each course as listed in the corresponding programme regulations.

The table below presents the classification of degrees awarded.

<i>Class of Degree</i>	<i>Range of GPA</i>	<i>Remarks</i>
First Class Honors	3.68 – 4.00	Summa Cum Laude
Second Class Upper	3.33 – 3.67	Magna Cum Laude
Second Class Lower	3.00 – 3.32	Cum Laude
Third Class	2.50 – 2.99	Bene Probatus

XIII. PROGRAM DESCRIPTIONS

A. COMMON PROGRAM OBJECTIVES

All departments within the School of IT share certain objectives.

- **Communication Objective**
Graduates will be able to effectively communicate their ideas in both written and oral form understanding that communication is a cooperative process.
- **Analytical Objective**
Graduates will be able to analyze situations and successfully determine cause and effect.
- **Research Objective**
Graduates will know how to use contemporary research tools as well as more traditional methods to locate and analyze information and develop knowledge.
- **Presentation Objective**
Graduates will be able to format and present information of various kinds (both technical and nontechnical) and deliver that information in a manner most appropriate to the message and the audience.
- **Practical Objective**
Graduates will have an understanding of the difference between theory and practice and how to extract from theory and extend its application to real-world situations.
- **Liberal Arts Objective**
Graduates will recognize that a broad knowledge base is critical to their ability to fully contribute to their professions and communities.
- **Lifelong Learning Objective**
Graduates will recognize that lifelong learning is essential to the ongoing process of professional and personal development.

B. CYBER SECURITY

As society becomes increasingly reliant on electronic information, and as the number of security incidents steadily climbs, the demand for a new breed of information technology professionals keeps growing. Cyber security is an emerging subject combining all the skills required to understand and react to these threats and this course has been designed to be holistic in nature. It

aims to produce well-rounded professionals with a broad range of cyber security skills, including the investigative mindset, as this has been identified as an important and often overlooked aspect of cyber security.

The Bachelor of Science in Cyber and Information Security is designed to meet current and anticipated needs for highly trained professionals. As a Cyber Security student, you will have the chance to build on the foundations of computer science and information technology, and develop a mastery of information assurance and security concepts, tactics and strategies.

GOALS

The general mission of the Bachelor of Science in Cyber and Information Security program is to provide students with a strong academic foundation that provides a clear picture of how the functional areas of cyber and information security work together to ensure the confidentiality, integrity, and availability of information and network-centric services and information.

The primary goal of this Bachelor's program is to help students link their professional aspirations with employment opportunities in government and industry.

SPECIFIC OBJECTIVES

In addition to the common program objectives, specific objectives include:

Ethical and Social Objective

- Graduates will have an understanding of ethical principles necessary for those entrusted with knowledge of tools and techniques that ensure the security of organizational information.
- Graduates will have an understanding of the possible social, economic, cultural and environmental impact of their decisions in a global and social context.

OUTCOMES

Upon graduation, students will:

- be prepared for employment in the field of cyber and information security in a business sector of choice with a strong understanding of cyber and information security concepts, project management process and team management skills
- be able to understand the laws, regulations, and customary expectations as they relate to information system and network security, individually identifiable information and related privacy concerns
- demonstrate familiarity with security operations and administration, demonstrate a working knowledge of infrastructure and operational security, know how to select and deploy access controls, conduct security analysis and monitoring, and apply principles of risk, response and recovery

CAREER OPPORTUNITIES

Some of the areas of work into which our graduates venture include:

- Information Assurance Analyst
- Vulnerability Assessment Specialist
- Intrusion Detection Specialist

- Security Analysts
- Security Systems Administration
- Penetration Testing

C. COMPUTER NETWORKS AND TELECOMMUNICATION SYSTEMS (FOR CURRENT STUDENTS ONLY)

The Computer Networks and Telecommunication Systems programme focuses on developing the technical ability to plan, design, install and monitor network architectures and systems, as well as the market insight and interpersonal skills that every employer looks for.

In this program, the students will develop an in-depth understanding of computer operating systems, network communication systems, telecommunication systems, access networks and will also learn how to integrate hardware and software with business elements.

This programme will also enable students to enroll in advanced networking covering Cisco Certified Network Associate (CCNA) in areas such as routing, switching, security and troubleshooting.

Crucially, students will also enhance market insight and interpersonal skills, as well as teamwork and communication skills, all of which are essential in today's professional business environment.

Together, these academic and practical skills will put students a step ahead when they enter the workplace.

An Industrial placement gives students an invaluable chance to hone their practical expertise, try out a potential career path and get the workplace experience valued by so many employers.

OBJECTIVES

Refer to the common program objectives.

OUTCOMES

Upon Graduation, students will:

- be prepared for employment in the field of Computer Networking in a business sector of choice with a strong understanding of networking concepts, project management process and team management skills
- be able to demonstrate familiarity in routing, switching, security and troubleshooting of data networks
- be able to plan, design, install and monitor computer networks of any type

CAREER OPPORTUNITIES

Some of the careers into which our graduates venture include:

- Network Administration
- System Analysts
- Telecommunications Analysts
- Computer Systems Analysts
- Network Systems and Data Communication Analysts.
- Network Architect

D. SOFTWARE ENGINEERING

Software engineers apply principles and techniques from computer science, engineering and mathematical analysis to specify, design, implement, evaluate, and maintain software systems. The Bachelor of Science in software engineering prepares students for a wide range of careers in the computing fields, as well as related positions in other domains, such as healthcare, finance, communications, government, industry, education, marketing, and academia.

Programming skills are one of the basic skills of a successful graduate of the Software Engineering program. Students also acquire requirement specification, design, quality assurance and project management skills. Problem solving in teams through effective use of oral and written communication is also emphasized in the program. Students specify, design, and implement non-trivial software systems and complete one semester capstone project. Each student is required to obtain professional experience (e.g., through an internship or a research project) prior to graduation, which is facilitated by the program's collaboration with industrial and academic partners.

SPECIFIC OBJECTIVES:

In addition to the common program objectives, within four years software engineering majors are expected to:

- Demonstrate core software engineering knowledge and skills
- Demonstrate ethical behavior in their pursuits
- Have achieved sustained employment and/or be pursuing additional educational opportunities
- Demonstrate professional and personal growth by seeking leadership and mentoring roles in their profession and community.

OUTCOMES:

Upon completion of the software engineering program, students will have attained:

- An ability to apply knowledge of mathematics, science and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- An ability to function on multidisciplinary teams
- An ability to identify, formulate and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
- A recognition of the need for and an ability to engage in life-long learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Graduates of an undergraduate SE program should be able to demonstrate the following qualities.

- [Professional Knowledge] Show mastery of software engineering knowledge and skills and of the professional standards necessary to begin practice as a software engineer. Students, through regular reinforcement and practice, need to gain confidence in their abilities as they progress through a software engineering program of study. In most instances, students acquire knowledge and skills through a staged approach in which they achieve different levels as each academic term progresses. In addition, graduates must have an understanding and appreciation of professional issues and standards related to ethics and professional conduct, economics, and societal needs.
- [Technical Knowledge] Demonstrate an understanding of and apply appropriate theories, models, and techniques that provide a basis for problem identification and analysis, software design, development, implementation, verification, and documentation. Software engineering employs concepts that are unique to the nature of software and its development and also draws others from a range of reference disciplines. Students should both be aware of these concepts and of their limitations, whether inherent or arising from their adaptation to software engineering. Students should be able to evaluate and reflect on the processes that they follow as well as upon the solutions that they produce.
- [Teamwork] Work both individually and as part of a team to develop and deliver quality software artifacts. Students need to perform tasks that involve working as an individual, but also experience many other tasks that entail working with a group. For group work, students should be informed about the nature of groups and of group activities and 21 roles as explicitly as possible. This must include an emphasis on the importance of such matters as a disciplined approach, adhering to deadlines, communication, and individual and team performance evaluations.
- [End-User Awareness] Demonstrate an understanding and appreciation of the importance of negotiation, effective work habits, leadership, and good communication with stakeholders in a typical software development environment. A program of study should include at least one major activity that involves producing a solution for a client. Software engineers must take the view that they have to produce software that is of genuine utility. Where possible, a program should incorporate a period of industrial experience as well as invited lectures from practicing software engineers and involvement in activities such as external software competitions. All this provides a richer experience and helps to create an environment that supports the development of high-quality software engineering graduates.
- [Design Solutions in Context] Design appropriate solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal, and economic concerns. Throughout their study, students should be exposed to a variety of appropriate approaches to engineering design in the general sense and to examples of their use in developing software for different application domains. They must be able to understand the strengths and limitations of the available options and the implications of selecting specific approaches for a given situation. Their proposed design solutions must be developed within the context of ethical, social, legal, security, and economic concerns.
- [Perform Trade-Offs] Reconcile conflicting project objectives, finding acceptable compromises within the limitations of cost, time, knowledge, existing systems, and organizations. Students should engage in exercises that expose them to conflicting and changing requirements. There should be a strong real-world element present in such cases to ensure that the experience is realistic. Curriculum units should address these issues, with the aim of ensuring high-quality functional and nonfunctional requirements and a feasible software design.

- [Continuing Professional Development] Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development. By the end of their program of study, students should show evidence of being self-motivated lifelong learners. Throughout a program of study, students should be encouraged to seek new knowledge and to appraise it for usefulness and relevance.

CAREER OPPORTUNITIES

Some of the areas of work into which our graduates venture include:

- Programmer/Analyst
- Database Administration
- Web Design and Programming
- Software Developers
- Systems Analysis and Architecture
- Information System Conception and/or Management
- IT Consultancy
- Software Support Specialist

XIV. LIST OF COURSES

Students in the Computer Networks and Telecommunication Systems and the Software Engineering departments will undertake a maximum of 7 courses each semester. Due to the fact that the Cyber Security program is a special program developed in collaboration and partnership with a foreign university, students in this program may take up to 8 courses in a semester. This does not include English and French single credit courses offered in the Freshman year.

Internships I and II are carried out at the end of Freshman and Sophomore years respectively, during the long holidays.

A. CYBER SECURITY

COURSE CODES/TITLES/CREDIT VALUES					
First Semester		CV	Second Semester		CV
FRESHMAN YEAR					
C	SIT 121 - Introduction to Unix	6	C	MIT 106- Algebra and Trigonometry	6
U	ENP 101- Entrepreneurial Project I	2	U	ENP 102- Entrepreneurial Project II	2
U	SCS 101 - The Search of Happiness I	2	U	SCS 102 – Sexuality, Love and Marriage	2
C	MIT 105 - Discrete Mathematics	6	C	SIT 122- Computer Programming II	6
U	MSR 101 - Introduction to Methodology of scientific research	4	E	Elective from the School of Business	6
C	SIT-113 - Computer Programming I	6	C	SIT 104 – Operating Systems	6

C	SIT 101- Introduction to Information Technology	6	C	SIT 102- Computer Architecture	6
U	SPT 101: Sports I	0	U	SPT 102: Sports II	0
U	ENG 101: Use of English I	1	C	SIT 118 – Information Systems I	6
U	FRE 101: Use of French I	1	U	ENG 102: Use of English II	1
U	SCS 121: On Campus Placement	1	U	FRE 102: Use of French II	1
U	SCS 111: Spiritual Exercise	0.5	U	SCS 122: On Campus Placement	1
			C	INTERNSHIP I	4
SUB TOTAL: 35.5			SUB TOTAL: 47		
SOPHOMORE YEAR					
C	SIT 215- Scripting Languages	6	C	SIT 222- Internetworking with Routers and Switches	6
U	ENP 201- Entrepreneurial Project III	2	C	SIT 217 – Introduction to Information Assurance Concepts	6
U	SCS 201 – Paths and Practices of Catholic Spirituality I	2	C	SIT 208 – Tutored Projects	12
C	SIT 209 - Cyber Law	6	U	ENP 202 – Entrepreneurial Project IV	2
C	SIT 213 - Information Systems II	6	U	SCS 202 – Paths and Practices of Catholic Spirituality II	2
C	SIT 201 - Computer Networks and Communication Technologies	6	C	SIT 214- Scientific Research Methods	6
C	MIT 201 - Numerical Analysis	6	C	MIT 202- Probability and Statistics	6
U	SCS 221: Off Campus Placement	1	U	SCS 222: Off Campus Placement	1
U	SCS 211: Spiritual Exercise	0.5			
				INTERNSHIP II	8
SUB TOTAL: 35.5			SUB TOTAL : 49		
JUNIOR YEAR					
C	SIT 353- Secure Data Communication and Cryptography	6	C	SIT 302- Industrial Placement	26
	SIT 355- Secure System Administration and Operations	6			
C	SIT 357- Applied Wireless Network Security	6			
C	SIT 395 – Comptia Security+	12			
U	SCS 301 – The Church and the Culture	2			
U	ENP 301 – Entrepreneurial Project V	2			
U	SCS 311 : Spiritual Exercise	0.5			
U	SCS 321 : Project for Social Change	1			
SUB TOTAL: 35.5			SUB TOTAL: 26		
SENIOR YEAR					
C	BUS 405 – Project Management	6	C	SIT 410 – Senior Project	18
C	SIT 455 – Penetration Testing	6	U	SCS 412 – Catholic Studies Perspective on Project Report	3
C	SIT 457 – Intro. To Incident Handling and Malicious Code	6	C	SIT 402 – Report Writing and Presentation	6
U	ENP 401 – Entrepreneurial Project VI	2			

U	SCS 411 – Spiritual Exercise	0.5		
SUB TOTAL: 20.5		SUB TOTAL: 27		

Maximum Total number of Credits: 276 credits

*** Certification Courses:

1. *Comptia Security +*
2. *Digital Forensics and Mobile Device Security*
3. *Cloud Computing and Data Center Design and Security*

B. COMPUTER NETWORKS AND TELECOMMUNICATION SYSTEMS

COURSE CODES / TITLES/CREDIT VALUES					
First Semester		CV	Second Semester		CV
FRESHMAN YEAR					
C	MIT 105- Discrete Mathematics	6	C	SIT 102- Computer Architecture	6
C	MIT 107- Mathematics I	6	C	MIT 104- Mathematics II	6
U	ENP 101- Entrepreneurial Project I	2	U	ENP 102- Entrepreneurial Project II	2
U	SCS 101- The Search of Happiness I	2	U	SCS 102 – Sexuality, Love and Marriage	2
U	MSR 101 - Introduction to Methodology of scientific research	6	C	SIT 122- Computer Programming II	6
C	SIT-113 Computer Programming I	6	C	SIT 118 – Information Systems I	6
C	SIT 101-Introduction to Information Technology	6	C	SIT 104 – Operating Systems	6
U	ENG 101: Use of English I	1	U	ENG 102: Use of English II	1
U	FRE 101: Use of French I	1	U	FRE 102: Use of French II	1
U	SPT 101: Sports I	0	U	SPT 102: Sports II	0
			C	INTERNSHIP I	4
Sub Total : 36			Sub Total : 40		
SOPHOMORE YEAR					
C	MIT 201 - Numerical Analysis	6	C	SIT 216- Telecommunication Systems I	6
C	SIT 201 - Computer Networks and Communication Technologies	6	C	SIT 208 – Tutored Projects	12
U	ENP 201- Entrepreneurial Project III	2	U	ENP 202 – Entrepreneurial Project IV	2
U	SCS 201 – Paths and Practices of Catholic Spirituality I	2	U	SCS 202 – Paths and Practices of Catholic Spirituality II	2
C	SIT 209 - Cyber law	6	C	SIT 214 – Scientific Research Methods	6
C	SIT 213 - Information Systems II	6	C	MIT 202- Probability and Statistics	6
E	Elective courses (choose one course)		C	SIT 222 – Internetworking with Routers and Switches	6
C	SIT 121- Introduction to Unix	6	C	INTERNSHIP II	8
C	SIT 203 – Object Oriented Programming	6			
Sub Total : 34			Sub Total : 48		
JUNIOR YEAR					
C	SIT 343- Access Networks	6	C	SIT 302- Industrial Placement	26
C	SIT 345- Telecommunication Systems II	6			
C	SIT 313- Mobile Networks	6			
C	SIT 391- Cisco Certified Network Associate	12			
U	SCS 301 – The Church and the Culture	2			
U	ENP 301 – Entrepreneurial Project V	2			
Sub Total : 34			Sub Total : 26		

SENIOR YEAR					
C	BUS 405 – Project Management	6	C	SIT 410 – Senior Project	18
C	SIT 445 - Network Security	6	U	SCS 412 – Catholic Studies Perspective on Project Report	3
E	Elective from the School of Business	6	C	SIT 402 – Report Writing and Presentation	6
U	ENP 401 – Entrepreneurial Project VI	2			
U	SCS 411 – Spiritual Exercise	0.5			
Sub Total : 20.5			Sub Total : 27		

Maximum Total Number of Credits: 265 credits

C. SOFTWARE ENGINEERING

COURSE CODES / TITLES/CREDIT VALUES					
First Semester		CV	Second Semester		C V
FRESHMAN YEAR					
C	SIT-113 Computer Programming I	6	C	SIT 122- Computer Programming II	6
U	ENP 101- Entrepreneurial Project I	2	C	SIT 118 – Information Systems I	6
U	SCS 101- The Search of Happiness I	2	C	SIT 104 – Operating Systems	6
C	MIT 107- Mathematics I	6	U	ENP 102- Entrepreneurial Project II	2
C	SIT 101-Introduction to Information Technology	6	U	SCS 102 – Sexuality, Love and Marriage	2
C	MIT 105- Discrete Mathematics	6	C	MIT 104- Mathematics II	6
U	MSR 101 - Introduction to Methodology of scientific research	6	C	SIT 102- Computer Architecture	6
U	ENG 101: Use of English I	1	U	ENG 102: Use of English II	1
U	FRE 101: Use of French I	1	U	FRE 102: Use of French II	1
U	SPT 101: Sports I	0	U	SPT 102: Sports II	0
U	SCS 121 : On Campus Placement	1	U	SCS 122 : On Campus Placement	1
U	SCS 111 : Spiritual Exercise	0.5			
			C	INTERNSHIP I	4
	Sub Total : 37.5			Sub Total : 41	
SOPHOMORE YEAR					
C	SIT 213 - Information Systems II	6	C	SIT 208 – Tutored Projects	12
C	SIT 203 – Object Oriented Programming	6	U	ENP 202 – Entrepreneurial Project IV	2
U	ENP 201- Entrepreneurial Project III	2	U	SCS 202 – Paths and Practices of Catholic Spirituality II	2
U	SCS 201 – Paths and Practices of Catholic Spirituality I	2	C	SIT 214 – Scientific Research Methods	6
C	SIT 201 - Computer Networks and Communication Technologies	6	C	SIT 218- Web Technologies	6
C	MIT 201 - Numerical Analysis	6	C	MIT 202- Probability and Statistics	6
C	SIT 209 - Cyber law	6	U	SCS 222 – Off Campus Placement	1
U	SCS 221: Off Campus Placement	1	C	INTERNSHIP II	8
U	SCS 211: Spiritual Exercise	0.5			
	Sub Total : 35.5			Sub Total : 43	
JUNIOR YEAR					
C	SIT 333- Systems Programming	6	C	SIT 302- Industrial Placement	26
C	SIT 335- Mobile Device Programming	6			
C	SIT 435- Software Engineering	6			
C	SIT 393- Oracle Certified Associate	12			

U	SCS 301 – The Church and the Culture	2			
U	ENP 301 – Entrepreneurial Project V	2			
U	SCS 311 – Spiritual Exercise	0.5			
U	SCS 321 – Project for Social Change	1			
Sub Total : 35.5			Sub Total : 26		
SENIOR YEAR					
C	BUS 405 – Project Management	6	C	SIT 410 – Senior Project	18
C	SIT 433 – Advanced Data Structures and Algorithms	6	U	SCS 412 – Catholic Studies Perspective on Project Report	3
E	Elective from the School of Business	6	C	SIT 402 – Report Writing and Presentation	6
U	ENP 401 – Entrepreneurial Project VI	2			
U	SCS 411 – Spiritual Exercise	0.5			
Sub Total : 20.5			Sub Total : 27		

**Maximum Total number of Credits: 266
credits**

Comprehensive list of all the courses in the School of IT

SIT433	Advanced Data Structures and Algorithms	4	Active	-	C	-
SIT435	Software Engineering	4	Active	-	C	-
SIT445	Network Security	4	Active	C	-	-
SIT 357	Applied Wireless Network Security	4	Active	C	-	-
SIT 455	Penetration Testing	4	Active	C	-	-
SIT 457	Introduction to Incident Handling and malicious code	4	Active	C	-	-
CSC101	Principles of Computer Science	4	Inactive			
CSC102	Introduction to Database Systems	4	Inactive			
CSC103	Computer System Hardware and Software	4	Inactive			
CSC105	C Programming language	6	Inactive			
CSC106	C programming II	6	Inactive			
CSC107	Discrete Mathematics	4	Inactive			
CSC108	Discrete Mathematics II	4	Inactive			
MIT101	IT Maths I	6	Inactive			
MIT101	Calculus I	3	Inactive			
MIT102	IT Maths II	6	Inactive			
MIT102	Calculus II	3	Inactive			
MIT103	Linear Algebra	3	Inactive			
PHY102	General Physics	4	Inactive			
SIT102	Computer Architecture	4	Active	F	F	F
SIT103	Algorithms and Programming I	4	Inactive			
SIT105	English for Computer Science	3	Inactive			
SIT106	Reliability and Measurement	3	Inactive			
SIT107	Techniques of Expression and Communication	3	Inactive			
SIT108	System Software	4	Inactive			
SIT109	Logical circuits and electronic elements	3	Inactive			
SIT111	General and Entrepreneurial Economy	3	Inactive			
SIT112	Algorithms and Programming II	4	Inactive			
SIT114	Analysis of Information systems I	4	Inactive			
SIT116	Introduction to Databases	4	Inactive			
SIT202	Web Technology and Programming I	6	Inactive			
SIT204	Software Engineering and Ergonomic methods	6	Inactive			
SIT205	Analysis of Information systems II	5	Inactive			
SIT206	IT project management	4	Inactive			
SIT207	E-Commerce	4	Inactive			
SIT210	Cryptography and Network Security	2	Inactive			
SIT211	Accounting and Management Methods	3	Inactive			
SIT212	Optimization methods	2	Inactive			
SIT303	English for Information Technology	3	Inactive			
SIT307	Web Technology and Programming II	4	Inactive			
SIT309	Mobile Networking	3	Inactive			
SIT311	Multimedia Communication & Quality Services	4	Inactive			
SIT321	Networks & Communication protocols	4	Inactive			
SIT327	Legal, Social and Ethical implications of ICT	3	Inactive			

Students who have failed some of the these courses which are no longer being offered, should consult the Dean or Special Assistant to the Dean in writing, for the equivalence of courses which they failed, that are no longer being offered.

F – *Foundation Course*

C – *Core Course*

E – *Elective Course,*

P – *Practical/Project Course,*

S – *Science Course*

XV. COURSE TERMINOLOGY

The following terminology shall be used for the different categories of courses:

- i) **Compulsory**: A course specified for a degree/programme which a student must take and obtain a pass before graduation.
- ii) **Elective**: A course which a student may choose in order to make up the required additional credits for the award of a degree.
- iii) **Prerequisite**: A course whose knowledge is essential for another specified course.
- iv) **Concurrent**: A specified course at the same level which students must take during the same semester.
- v) **Required**: A course specified by a Department which students offering such a course must score at least a D.

A prerequisite requirement shall be fulfilled by obtaining a pass in the course. However, a student who fails the course but scores a minimum of D shall be deemed to have met the prerequisite.

GRADUATION REQUIREMENTS

Students are required to earn a minimum of 268 credits and a maximum of 280 credits upon graduation. The table below breaks down these credits into six major subject areas. The table equally specifies the minimum credits required to be earned and suggests some courses which the students can take to earn these credits.

<i>Subject Area</i>	<i>Specific Area</i>	<i>Minimum Credits to be earned</i>	<i>Recommended Courses</i>	<i>Remarks</i>
University Requirements	Entrepreneurship	12	ENP101, ENP102, ENP201, ENP202, ENP301, ENP401	CERI office
	Catholic Studies	22	SCS101, SCS102, SCS201, SCS202, SCS301, SCS402, SCS401, SCS404	School of Catholic Studies
	Language	4	ENG101, ENG102, FRE101, FRE102	
Sciences		30	MIT107, MIT104, MIT 106, MIT105, MIT201, MIT202	
Foundation courses		48	SIT101, SIT113, MSR101, SIT118, SIT102, SIT104, SIT209, SIT214	
Core courses	Cyber Security	48	SIT121, SIT217, SIT215, SIT222, SIT353, SIT355, SIT357, SIT455, SIT457	
	SE	48	SIT218, SIT203, SIT213, SIT122, SIT333, SIT335, SIT433, SIT435	
	N/T	48	SIT201, SIT216, SIT343, SIT345, SIT313, SIT445, SIT 222 , SIT121	
Elective Courses	Cyber Security	18	SIT218, SIT203, SIT 213, SIT201, SIT216, SIT122, MIT107, MIT104, 2 electives from School of Business	
	SE	18	SIT121, MIT106, SIT217, SIT215, SIT222, SIT201, SIT216, 2 electives from School of Business	
	N/T	18	SIT 203, SIT 215, SIT 218, SIT213, SIT 122, 2 Electives from the School of Business	

Practicals / Projects	86	SIT208, SIT391, SIT393, SIT395, SIT302, SIT410, SIT402, Internships	
Total	268		

Students are expected to earn 16 credits on internship which is divided into three sections. Two internships carried out during any two summer holidays (2 credit each) and the Industrial placement during the second semester of their junior year. Students must present an attestation of completion for every internship carried out during their summer holidays as well as a write-up on the activities. Every student must complete at least one professional certification programme upon graduation. The school provides logistics and none-financial support for the students' registration for the certification examination.

Students should have at least 100 hours of volunteerism activities in any organization of their choice. However, Students must show documented evidence of their participation in such activities. This is done through an attestation form the organization which will be confirmed by the coordinator of entrepreneurial projects.

In addition, all students are expected to:

- i) Earn at least 2.0 cumulative point average in all applicable courses taken at CUIB.
- ii) Complete the general Cameroon Higher Education requirements as follows;
 - a) Complete the Language competency requirement – pass in English and French Language. 101 & 102 = 4 credits.
 - b) A pass in Physical education 1&2
 - c) Sponsor the validation of his or her A Level results with the GCE Board or other equivalent Boards.
 - d) Research Method and Scientific Writing 1 & 2 = 4 credits.
- iii) Complete all Departmental requirements
- iv) Payment of all outstanding bills and return of all requirement and library books.
- v) Application to the office of the Provost indicating readiness to graduate.

XVI. COURSE DESCRIPTIONS

A) DEPARTMENT: CYBER SECURITY

1. Freshman Year

Semester I

SIT 101: Introduction to Information Technology

This course introduces students to the technologies that are fundamental in the gathering, processing, representation and storage of information. The course covers fundamentals of computer hardware, software, programming and its tools, data communications, databases and SQL, networks, the Internet and its tools and computer security. Some insights into future trends are provided.

SIT 113: Computer programming I

This course introduces students to the area of computer programming, taking into consideration the fact that this might be the first course on computer programming that the student is encountering in his / her educational career. Emphasis shall be placed on algorithmic thinking, algorithm representation and introduction to a specific programming language.

MIT 107: Mathematics I

This course serves as the first mathematics course for freshmen in the university and covers introductory notions to calculus. The course builds on advanced level mathematics to further strengthen students' analytical view to mathematical problems. The course focuses on drilling

students to formulate mathematical problems as well as equipping them with techniques for solving these problems. Topics such as Mappings, Functions, differentiation and Integration are treated in this course.

MIT 105: Discrete Mathematics

This course introduces the study of finite systems as an increasingly important concept in the computer age and a founding pillar in information technology. The digital computer is basically a finite structure, and many of its properties can be understood and interpreted within the frame work of Finite Mathematical Systems. The course covers formal mathematical objects like Sets, Graphs, Matrices, recurrence relations and examines how these objects arise in computer science- related problems.

MSR 101: Introduction to Methodology of Scientific Research

This course covers the principles and procedure involved in writing technical documents. It trains students on organizing information, designing graphical aids/diagrams, and writing specialized sections such as abstracts, instructions, manuals and proposals. It equally drills students on how to analyzing their audience and set the purpose of their write-up.

SIT 121: Introduction to UNIX

This course covers UNIX file and operating system. It equally covers an understanding of multi-user and multitasking concepts. Editors, X-windows, Awk, email, Internet commands, shell commands and shell scripts are also treated in this course. Projects, which provide practical experience, are completed as part of the homework requirements.

SEMESTER II

SIT 122: Computer programming II

This course is a follow up of the computer programming I course. It deepens the student's knowledge in computer programming through rigorous exercises / mini projects and covers topics like data types, data structures, programmer-defined data types, pointer, dynamic data structures and memory management from a programming perspective. A prerequisite for this course will be a D+ in computer programming I.

SIT 102: Computer Architecture

This course introduces the micro components that are interconnected for the functioning of a computer system. Very little emphasis is placed on the physics and electronics involved. The course covers the functioning of logic gates and combinational circuits and how they are used to implement Boolean functions which can be analyzed with truth tables and K-maps. Introductory notions in sequential circuits, timing diagrams and the design of registers and state diagrams are equally covered. Additional topics may include in a descriptive manner, the interconnections between combinational circuits (ALU, controllers, etc) sequential circuits (Registers, RAM, ROM, etc), Buses (data, address and control) and peripheral devices in a computer system. It equally introduces assembly programming using basic commands only

MIT 104: Mathematics II

This course is a continuation of the mathematics I course. It covers introductory notions on linear algebra such as matrices and their determinants, vector spaces, linear transformation and solutions to systems of linear equations. Emphasis is on how these notions are useful in handling large problems in systems analysis.

MIT 106: Algebra and Trigonometry

This course is designed for students needing mathematical skills; topics in this course are as follows. In the Algebra section: basic operations on real and complex numbers, fractions, exponents and radicals, Determinates, Solution of linear, fractional, quadratic and system equations. In the Trigonometry section: definition and identities, angular measurements, solving triangles, vectors,

graphs and logarithms will be treated.

SIT 118: Information Systems I

This course introduces the concepts of information systems as used in businesses and covers areas like definition, classification, components of a computer-based Information Systems, the place and role of Information Systems in various management structures and at various levels of management as well as analysis of IS. Introduction to database concepts are equally covered. Students will practice working with ISs and be able to perform simple create, read, update and delete operations on computer-based information systems.

SIT 104: Operating Systems

This course covers the key concepts and components of modern operating systems. The course begins with a review of related hardware topics, an overview of system calls and ways of structuring, designing and implementing operating systems. Essential concepts of operating systems are covered in depth, including the process concept and concurrency, management of main and virtual memory, mass storage management, the file system and input/output subsystems, protection and security. Various modern systems are used as examples including Windows, Mac OSX and UNIX/Linux.

2. Sophomore Year

SEMESTER III

MIT 201: Numerical Analysis

This course covers some elementary numerical methods that are frequently used in computations. Topics such as errors and mistakes in computation, iterative solutions to equations, interpolation, Gaussian elimination, numerical integration and differentiation, etc shall be covered in this course. A prerequisite for this course will be a D+ in the Mathematics II course.

SIT 213: Information Systems II

This course bases on the knowledge acquired in information systems I and teaches students how to design, construct, test, and debug databases using an Integrated Development Environment (IDE). Emphasis is on the design of databases that meet the needs of its users as well as the methodology used. A prerequisite for this course will be a D+ in the information systems I course.

SIT 201: Computer Networks and Communication Technologies

This course covers the different layers of the OSI reference model and the TCP/IP model with emphasis on the role of each layer; describing transmission techniques, media and protocols associated to each layer as well as network topologies. Other topics such as Address classes; Subnetting; Introductory notions to telephony; and Unified communications will be introduced in this course. A prerequisite for this course will be a D+ in the introduction to information technology course.

SIT 209: Cyber Law

This course presents a legal perspective of the cyber space and the activities within it. Topic such as Infractions in cyberspace, Investigating and prosecuting crime in cyberspace, on-line contracts, Trademark issues in Cyberspace, On-line service liability issues, Privacy issues, Laws tackling cyber criminality as well as an examination of some international bodies working to curb cyber criminality are covered with this course.

SIT 215: Scripting Languages

This course introduces students to the use of scripting and the scripting languages of Perl, Python, and Ruby on Rails. The class will cover the use of scripting to solve short problems, automate routine tasks, integrate across pieces of software, and prototype code ideas. The merits of code-complete design versus on-the-fly coding as well as coding and code documentation styles will be discussed. Tasks involving input/out, regular expressions, and file operations are included. Students are expected to fully script solutions for real-world tasks assigned as part of the course.

SIT 217: Introduction to Information Assurance Concept

This course covers topics related to administration of network security. Topics include a survey of encryption and authentication algorithms; threats to security; operating system security; IP security; user authentication schemes; web security; email security protocols; intrusion detections; viruses; firewalls; Virtual Private Networks; network management and security policies and procedures. Laboratory projects are assigned as part of the homework requirements.

SEMESTER IV

MIT 202: Probability and Statistics

This course introduces students to the nature and purpose of probability and mathematical statistics. It covers topics such as Sample Mean and Variance, Random Experiments, Mathematical Probability, Random Variables, Discrete and Continuous Distributions; Mean and Variance of a Distribution; Binomial, Poisson and Hyper-geometric Distributions; Normal Distribution; Random Sampling, Random Numbers; Estimation of Parameters; Confidence Intervals; Testing of Hypotheses; Decisions; Quality Control; Acceptance Sampling ; Goodness Fit. X2- Test.

SIT 214: Scientific Research Methods

This course introduces students to the concepts and practices of social research, its history, importance and applications. Topics such as sampling, measurements, design and analysis with respect social research will be covered in this course. A prerequisite for this course will be a D+ in the Introduction IV to Research Methodology course.

SIT 216: Telecommunications Systems I

This course introduces students to the basic components of a telecommunication system covering topics such as Telecommunications networks and standards; Electrical signals, frequencies and modulation; analogue and digital transmissions; switch size and link capacity; queuing systems in telecommunications; digital networks and signaling techniques.

SIT 222: Internetworking with Routers and Switches

This course introduces configuration routers and switches to build multiprotocol internetworks. OSI reference model, basic LAN and WAN design, dial access services, TCP/IP protocol suites, IP addressing, subnetting, static and dynamic routing, and WAN technologies such as HDLC, PPP, Frame Relay, ATM and ISDN.

Electives from the School of Business

CODE	TITLE	Credit Value	COMMENTS
ACC102	Principles of Accounting	6	
BUS101	Principles of management	6	
BUS102	Fundamentals of Business Economics II	6	
BUS103	Fundamentals of Business Economics I	6	
FIN102	Principles of Finance	6	
BUS214	Small Business Management	6	
BUS218	E-Business	6	
MKT201	Customer Service Management	6	

Sophomore students are required to register and validate a freshman or Sophomore Year course from the School of Business. Any introductory course on accounting, management and or finance will suffice. Students are required to consult the handbook for the School of Business and talk to the corresponding course instructors for orientation.

SIT 208: Tutored Projects

This course runs throughout the sophomore year and will be examined through a series of working sessions, project write-up and presentation. The course drills students on what it takes to deliver a project and encourages them to make use of the knowledge acquired after two years of studies in the School of IT.

3. Junior Year

SEMESTER V

SIT 353: Secure Data Communication and Cryptography

This course follows the protocol education provided in the network security course with a more detailed and practical look at secure transactions and correspondence, as well as protection of data in storage. Within the confines of the ISO-OSI model, this course discusses data communication with emphasis on the security available at the layers, secure sockets layer, and both wired and wireless security topics. One-way message digests/hashes and encryption history and protocols are explored in-depth. Topics include virtual private networks, one-way hashes/message digests, digital signatures, secret-key and public key cryptography processes and algorithms.

SIT 355: Secure System Administration and Operations

This course introduces students to security settings and requirements of Linux and Windows-based systems and web services. It also introduces students to Linux and Windows-based web services, including methods of configuring, testing the security and the implementing of countermeasures to discovered vulnerabilities. Topics include Linux security settings, IP tables, securing IIS web service, securing Apache web service, access control methods and host auditing and tools.

SIT 357: Applied Wireless Network Security

This course will explore the unique challenges presented by wireless networking, including the management of dual network devices (Bluetooth, 3G, 4G, and WiFi). Students will evaluate emerging business and technical initiatives, such as bring your own device (BYOD) and securely implement mobile IP networks based on IPv4, IPv6 and the 3GPP. Students will learn penetration testing strategies to effectively evaluate currently implemented security controls, utilizing cutting edge tools such as BackTrack 5, Vistumbler, Wireshark, and inSIDDer for network discovery and packet analysis. Additionally, students will be exposed to the site survey, network management and analysis capabilities of industry leading software such as Air Magnet, Ekahau and OmniPeek. Students are required to purchase an Alfa wireless adapter and acquire a wireless router.

Professional Certifications

This course prepares students for one or more internationally recognized professional certifications examinations. It is the students' responsibility to register and take the certification exams. However, an end of course evaluation will be carried out and recorded in the students' Transcript. One or two of the following certifications will be covered this Academic Year:

SIT 391: Oracle Certified Associates (OCA)

SIT 393: Cisco Certified Network Associate (CCNA)

SIT 395: Comptia Security +

Semester VI

SIT 302: Industrial Placement

This course initiates and integrates students into professional life. The course is taken off-campus in any IT related firm or organization under strict supervision from the school of IT. Throughout the semester, students are expected to appear at their place of work and spend a full working day, dressed professionally and carry out tasks as required by the organization. Regular faculty visits from the school of IT shall be performed, to facilitate continuous assessment of the students'

performance. At the end of the internship, the students are expected to present and defend an internship report which they would submit to the school.

4. Senior Year

SEMESTER VII

SIT 455: Penetration Testing

This course explores the foundational concepts, methods and techniques in preparing and conducting penetration tests. Throughout the course students are introduced to various tools as well as unravel complex methods for exploiting client-side, service side and privilege escalation attacks. Most importantly students learn how to construct a final report outlining discovered vulnerabilities, make suggested recommendations to remediate and/or mitigate those vulnerabilities. Students also learn how to describe the findings wherein non-technical personnel understand the ramifications of these vulnerabilities in a business sense.

SIT 457: Introduction to Incident Handling and Malicious Code

This course provides a detailed understanding of incidents from attacks of malicious software. This course addresses the history and practice of coding that occurs in viruses, worms, spyware, Trojan horses, remote management back doors and root kits. Students learn preventative measures and tools, and explore how to rid systems of malicious software and prevent re-infection. Recovery processes and backup methods are explored. In addition to covering basic incident handling preparation, response and recovery practices, and the course goes into detail regarding malicious software.

*** BUS 405 Project Management– From the School of Business**

Students are advised to take the project management course from the School of Business. The course code is BUS 405 and it is titled Project management. PMP certification courses or short courses on project management, which are offered through our online programme, are equally acceptable substitutes.

SEMESTER VIII

Electives from any other school

School of Business

CODE	TITLE	Credit Value
ACC305	Accounting Information System	6
BNF303	E-Banking and instruments of payment	6
BUS303	Management Information System	6

Senior Year's students are required to register and validate a course, relevant to their specialty, from either the SB or SENG or SANR. Students are urged to consult the handbook for the appropriate school and talk to the corresponding course instructors for orientation. Students can take any other courses as approved by their corresponding departments.

(SIT 402): Report writing and Presentations

This course drills students on how to write reports and boosts their confidence in presentations. The course is divided into two parts 40% lectures on types of report, report writing style, formatting reports, and more and 60% of practical which will be carried out during the annual trade/academic fair. Students are expected to prepare and present on various topics during the morning / academic sessions of the fair.

(SIT 410): Senior Project

As a partial fulfillment of the requirement for graduation, the student(s) plan and develop a project in which he/she demonstrates the ability to analyze and synthesize information. He/she learns to effectively communicate the results of his/her study through a dissertation of work experience project not more than 30 pages. The work must fit within the framework of the institutional priorities and research norms. The student(s) will be expected to produce 4 copies, 3 for the panel of examiners, and one for himself/herself. After examining the project, the student(s) will be required to effect corrections as required by panel if he/she wants copies to be kept in CUIB library.

***Note** Senior year courses are project based and if possible, would be taught in line with students' final year project.*

B) DEPARTMENT: COMPUTER NETWORKS AND TELECOMMUNICATION SYSTEMS

1. Freshman Year

SEMESTER I

SIT 101: Introduction to Information Technology

This course introduces students to the technologies that are fundamental in the gathering, processing, representation and storage of information. Based on the fact that students have been interacting with some of these technologies in their everyday activities, the course paints a formal picture of the concepts of Data, Information, Hardware (Input and Output), Software and Networks. Practical aspects will be on modern information representation technologies (HTML).

SIT 113: Computer programming I

This course introduces students to the area of computer programming, taking into consideration the fact that this might be the first course on computer programming that the student is encountering in his / her educational career. Emphasis shall be placed on algorithmic thinking, algorithm representation and introduction to a specific programming language.

MIT 107: Mathematics I

This course serves as the first mathematics course for freshmen in the university and covers introductory notions to calculus. The course builds on advanced level mathematics to further strengthen students' analytical view to mathematical problems. The course focuses on drilling students to formulate mathematical problems as well as equipping them with techniques for solving these problems. Topics such as Mappings, Functions, differentiation and Integration are treated in this course.

MIT 105: Discrete Mathematics

This course introduces the study of finite systems as an increasingly important concept in the computer age and a founding pillar in information technology. The digital computer is basically a finite structure, and many of its properties can be understood and interpreted within the frame work of Finite Mathematical Systems. The course covers formal mathematical objects like Sets, Graphs, Matrices, recurrence relations and examines how these objects arise in computer science- related problems.

MSR 101: Introduction to Methodology of Scientific Research

This course covers the principles and procedure involved in writing technical documents. It trains students on organizing information, designing graphical aids/diagrams, and writing specialized sections such as abstracts, instructions, manuals and proposals. It equally drills students on how to analyzing their audience and set the purpose of their write-up.

SEMESTER II

SIT 122: Computer programming II

This course is a follow up of the computer programming I course. It deepens the student's knowledge in computer programming through rigorous exercises / mini projects and covers topics like data types, data structures, programmer-defined data types, pointer, dynamic data structures and memory management from a programming perspective. A prerequisite for this course will be a D+ in computer programming I.

SIT 102: Computer Architecture

This course introduces the micro components that are interconnected for the functioning of a computer system. Very little emphasis is placed on the physics and electronics involved. The course covers the functioning of logic gates and combinational circuits and how they are used to implement Boolean functions which can be analyzed with truth tables and K-maps. Introductory notions in sequential circuits, timing diagrams and the design of registers and state diagrams are equally covered. Additional topics may include in a descriptive manner, the interconnections between combinational circuits (ALU, controllers, etc) sequential circuits (Registers, RAM, ROM, etc), Buses (data, address and control) and peripheral devices in a computer system. It equally introduces assembly programming using basic commands only

MIT 104: Mathematics II

This course is a continuation of the mathematics I course. It covers introductory notions on linear algebra such as matrices and their determinants, vector spaces, linear transformation and solutions to systems of linear equations. Emphasis is on how these notions are useful in handling large problems in systems analysis.

SIT 118: Information Systems I

This course introduces the concepts of information systems as used in businesses and covers areas like definition, classification, components of a computer-based Information Systems, the place and role of Information Systems in various management structures and at various levels of management as well as analysis of IS. Introduction to database concepts are equally covered. Students will practice working with ISs and be able to perform simple create, read, update and delete operations on computer-based information systems.

SIT 104: Operating Systems

This course covers the key concepts and components of modern operating systems. The course begins with a review of related hardware topics, an overview of system calls and ways of structuring, designing and implementing operating systems. Essential concepts of operating systems are covered in depth, including the process concept and concurrency, management of main and virtual memory, mass storage management, the file system and input/output subsystems, protection and security. Various modern systems are used as examples including Windows, Mac OSX and UNIX/Linux.

2. Sophomore Year

SEMESTER III

MIT 201: Numerical Analysis

This course covers some elementary numerical methods that are frequently used in computations. Topics such as errors and mistakes in computation, iterative solutions to equations, interpolation, Gaussian elimination, numerical integration and differentiation, etc. shall be covered in this course. A prerequisite for this course will be a D+ in the Mathematics II course.

SIT 213: Information Systems II

This course bases on the knowledge acquired in information systems I and teaches students how to design, construct, test, and debug databases using an Integrated Development Environment (IDE). Emphasis is on the design of databases that meet the needs of its users as well as the methodology used. A prerequisite for this course will be a D+ in the information systems I course.

SIT 203: Object Oriented Programming

This course introduces students to the object oriented programming paradigm and concepts such as classes, objects, methods, interfaces, packages, inheritance, encapsulation, and polymorphism. Emphasis is on the application of these concepts to practical problems. A prerequisite for this course will be a D+ in the Computer programming II course.

SIT 201: Computer Networks and Communication Technologies

This course covers the different layers of the OSI reference model and the TCP/IP model with emphasis on the role of each layer; describing transmission techniques, media and protocols associated to each layer as well as network topologies. Other topics such as Address classes and subnetting will be introduced in this course. A prerequisite for this course will be a D+ in the introduction to information technology course.

SIT 209: Cyber Law

This course presents a legal perspective of the cyber space and the activities within it. Topic such as Infractions in cyberspace, Investigating and prosecuting crime in cyberspace, on-line contracts, Trademark issues in Cyberspace, On-line service liability issues, Privacy issues, Laws tackling cyber criminality as well as an examination of some international bodies working to curb cyber criminality are covered with this course..

SEMESTER IV

MIT 202: Probability and Statistics

This course introduces students to the nature and purpose of probability and mathematical statistics. It covers topics such as Sample Mean and Variance, Random Experiments, Mathematical Probability, Random Variables, Discrete and Continuous Distributions; Mean and Variance of a Distribution; Binomial, Poisson and Hyper-geometric Distributions; Normal Distribution; Random Sampling, Random Numbers; Estimation of Parameters; Confidence Intervals; Testing of Hypotheses; Decisions; Quality Control; Acceptance Sampling ; Goodness Fit. X2- Test.

SIT 214: Scientific Research Methods

This course introduces students to the concepts and practices of social research, its history, importance and applications. Topics such as sampling, measurements, design and analysis with respect social research will be covered in this course. A prerequisite for this course will be a D+ in the Introduction to Research Methodology course.

SIT 216: Telecommunications Systems I

This course introduces students to the basic components of a telecommunication system covering topics such as Telecommunications networks and standards; Electrical signals, frequencies and modulation; analogue and digital transmissions; switch size and link capacity; queuing systems in telecommunications; digital networks and signaling techniques.

SIT 222: Internetworking with Routers and Switches

This course introduces configuration routers and switches to build multiprotocol internetworks. OSI reference model, basic LAN and WAN design, dial access services, TCP/IP protocol suites, IP addressing, subnetting, static and dynamic routing, and WAN technologies such as HDLC, PPP, Frame Relay, ATM and ISDN.

Electives from the School of Business

CODE	TITLE	Credit Value	COMMENTS
ACC102	Principles of Accounting	6	
BUS101	Principles of management	6	
BUS102	Fundamentals of Business Economics II	6	

BUS103	Fundamentals of Business Economics I	6	
FIN102	Principles of Finance	6	
BUS214	Small Business Management	6	
BUS218	E-Business	6	
MKT201	Customer Service Management	6	

Sophomore students are required to register and validate a freshman or Sophomore Year course from the School of Business. Any introductory course on accounting, management and or finance will suffice. Students are required to consult the handbook for the School of Business and talk to the corresponding course instructors for orientation.

SIT 208: Tutored Projects

This course runs throughout the sophomore year and will be examined through a series of working sessions, project write-up and presentation. The course drills students on what it takes to deliver a project and encourages them to make use of the knowledge acquired after two years of studies in the School of IT.

3. Junior Year

SEMESTER V

SIT 333: Systems Programming

This course trains students on the issues involved in developing system-dependent applications. Topics such as file manipulations, working with vendor and third party programmers' libraries (static and dynamic), programming for specific hardware, device driver and network programming are treated within this course. The course is project based.

SIT 343: Access Networks

This course covers the fundamentals structure and role of access networks within a telecommunication system. Emphasis is on the feeder and distribution layers of access networks, the structure and role in a telecommunication system. The course equally covers the various technologies (Wired and Wireless) available for providing connectivity to telecommunication networks from a descriptive and configuration standpoint.

SIT 345: Telecommunications Systems II

This course is a continuation of the Telecommunication systems I course. It covers topics such as local and long-distance networks; Enterprise networks; concepts in transmission transport; CCITT signaling system No. 7; Voice over IP in packet Switched networks as well as community antenna television (Cable TV). A prerequisite of this course will be a D+ in the Telecommunications Systems I course.

SIT 313: Mobile Networks

This course provides an academic backing to mobile communications and wireless networks which students would have worked with during the work experience course. It presents the wireless and mobile network architectures, technologies and protocols. Topics covered include cellular and mobile IP concepts multiple-access methods, spread spectrum modulation, and different wireless network protocols such as WiFi, WiMAX and Bluetooth. It equally introduces the various wireless 1G, 2G, and 3G platforms, architecture, and protocols.

Professional Certifications

This course prepares students for one or more internationally recognized professional certifications examinations. It is the students' responsibility to register and take the certification exams. However, an end of course evaluation will be carried out and recorded in the students' Transcript. One or two of the following certifications will be covered this Academic Year:

SIT 391: Oracle Certified Associates (OCA)

Semester VI

SIT 302: Industrial Placement

This course initiates and integrates students into professional life. The course is taken off-campus in any IT related firm or organization under strict supervision from the school of IT. Throughout the semester, students are expected to appear at their place of work and spend a full working day, dressed professionally and carry out tasks as required by the organization. Regular faculty visits from the school of IT shall be performed, to facilitate continuous assessment of the students' performance. At the end of the internship, the students are expected to present and defend an internship report which they would submit to the school.

4. Senior Year

SEMESTER VII

SIT 445: Network Security

This course provides an academic backing to network security which students would have worked with during the work experience course. The course presents the need for and key concepts in information security in relation to Hacking. It describes Security mechanisms and tools used at each layer of the TCP/IP model. This course will also help students to understand the security mechanisms used in the process of information exchange in a network, tools and technologies used to secure access to resources such as servers in a network and finally security of systems and applications.

*** BUS 405 Project Management– From the School of Business**

Students are advised to take the project management course from the School of Business. The course code is BUS 405 and it is titled Project management. PMP certification courses or short courses on project management, which are offered through our online Programme, are equally acceptable substitutes.

SEMESTER VIII

Electives from any other school

School of Business

CODE	TITLE	Credit Value
ACC305	Accounting Information System	4
BNF303	E-Banking and instruments of payment	4
BUS303	Management Information System	4

Senior Year's students are required to register and validate a course, relevant to their specialty, from either the SMS or SENG or SANR. Any sophomore or junior year course will suffice. Students are urged to consult the handbook for the appropriate school and talk to the corresponding course instructors for orientation. Students can take any other courses as approved by their corresponding departments.

(SIT 402): Report writing and Presentations

This course drills students on how to write reports and boosts their confidence in presentations. The course is divided into two parts 40% lectures on types of report, report writing style, formatting reports, and more and 60% of practical which will be carried out during the annual trade/academic

fair. Students are expected to prepare and present on various topics during the morning / academic sessions of the fair.

(SIT 410): Senior Project

As a partial fulfillment of the requirement for graduation, the student(s) plan and develop a project in which he/she demonstrates the ability to analyze and synthesize information. He/she learns to effectively communicate the results of his/her study through a dissertation of work experience project not more than 30 pages. The work must fit within the framework of the institutional priorities and research norms. The student(s) will be expected to produce 4 copies, 3 for the panel of examiners, and one for himself/herself. After examining the project, the student(s) will be required to effect corrections as required by panel if he/she wants copies to be kept in CUIB library.

Note Senior year courses are project based and if possible, would be taught in line with students' final year project.

C) DEPARTMENT: SOFTWARE ENGINEERING

1. Freshman Year

SEMESTER I

SIT 101: Introduction to Information Technology

This course introduces students to the technologies that are fundamental in the gathering, processing, representation and storage of information. Based on the fact that students have been interacting with some of these technologies in their everyday activities, the course paints a formal picture of the concepts of Data, Information, Hardware (Input and Output), Software and Networks. Practical aspects will be on modern information representation technologies (HTML).

SIT 113: Computer programming I

This course introduces students to the area of computer programming, taking into consideration the fact that this might be the first course on computer programming that the student is encountering in his / her educational career. Emphasis shall be placed on algorithmic thinking, algorithm representation and introduction to a specific programming language

MIT 107: Mathematics I

This course serves as the first mathematics course for freshmen in the university and covers introductory notions to calculus. The course builds on advanced level mathematics to further strengthen students' analytical view to mathematical problems. The course focuses on drilling students to formulate mathematical problems as well as equipping them with techniques for solving these problems. Topics such as Mappings, Functions, differentiation and Integration are treated in this course.

MIT 105: Discrete Mathematics

This course introduces the study of finite systems as an increasingly important concept in the computer age and a founding pillar in information technology. The digital computer is basically a finite structure, and many of its properties can be understood and interpreted within the frame work of Finite Mathematical Systems. The course covers formal mathematical objects like Sets, Graphs, Matrices, recurrence relations and examines how these objects arise in computer science- related problems.

MSR 101: Introduction to Methodology of Scientific Research

This course covers the principles and procedure involved in writing technical documents. It trains students on organizing information, designing graphical aids/diagrams, and writing specialized sections such as abstracts, instructions, manuals and proposals. It equally drills students on how to analyzing their audience and set the purpose of their write-up.

SEMESTER II

SIT 122: Computer programming II

This course is a follow up of the computer programming I course. It deepens the student's knowledge in computer programming through rigorous exercises / mini projects and covers topics like data types, data structures, programmer-defined data types, pointer, dynamic data structures and memory management from a programming perspective. A prerequisite for this course will be a D+ in computer programming I.

SIT 102: Computer Architecture

This course introduces the micro components that are interconnected for the functioning of a computer system. Very little emphasis is placed on the physics and electronics involved. The course covers the functioning of logic gates and combinational circuits and how they are used to implement Boolean functions which can be analyzed with truth tables and K-maps. Introductory notions in sequential circuits, timing diagrams and the design of registers and state diagrams are equally covered. Additional topics may include in a descriptive manner, the interconnections between combinational circuits (ALU, controllers, etc.) sequential circuits (Registers, RAM, ROM, etc.), Buses (data, address and control) and peripheral devices in a computer system. It equally introduces assembly programming using basic commands only

MIT 104: Mathematics II

This course is a continuation of the mathematics I course. It covers introductory notions on linear algebra such as matrices and their determinants, vector spaces, linear transformation and solutions to systems of linear equations. Emphasis is on how these notions are useful in handling large problems in systems analysis.

SIT 118: Information Systems I

This course introduces the concepts of information systems as used in businesses and covers areas like definition, classification, components of a computer-based Information Systems, the place and role of Information Systems in various management structures and at various levels of management as well as analysis of IS. Introduction to database concepts are equally covered. Students will practice working with ISs and be able to perform simple create, read, update and delete operations on computer-based information systems.

SIT 104: Operating Systems

This course covers the key concepts and components of modern operating systems. The course begins with a review of related hardware topics, an overview of system calls and ways of structuring, designing and implementing operating systems. Essential concepts of operating systems are covered in depth, including the process concept and concurrency, management of main and virtual memory, mass storage management, the file system and input/output subsystems, protection and security. Various modern systems are used as examples including Windows, Mac OSX and UNIX/Linux.

2. Sophomore Year

SEMESTER III

MIT 201: Numerical Analysis

This course covers some elementary numerical methods that are frequently used in computations. Topics such as errors and mistakes in computation, iterative solutions to equations, interpolation, Gaussian elimination, numerical integration and differentiation, etc. shall be covered in this course. A prerequisite for this course will be a D+ in the Mathematics II course.

SIT 213: Information Systems II

This course bases on the knowledge acquired in information systems I and teaches students how to design, construct, test, and debug databases using an Integrated Development Environment (IDE).

Emphasis is on the design of databases that meet the needs of its users as well as the methodology used. A prerequisite for this course will be a D+ in the information systems I course.

SIT 203: Object Oriented Programming

This course introduces students to the object oriented programming paradigm and concepts such as classes, objects, methods, interfaces, packages, inheritance, encapsulation, and polymorphism. Emphasis is on the application of these concepts to practical problems. A prerequisite for this course will be a D+ in the Computer programming II course.

SIT 201: Computer Networks and Communication Technologies

This course covers the different layers of the OSI reference model and the TCP/IP model with emphasis on the role of each layer; describing transmission techniques, media and protocols associated to each layer as well as network topologies. Other topics such as Address classes and subnetting will be introduced in this course. A prerequisite for this course will be a D+ in the introduction to information technology course.

SIT 209: Cyber Law

This course presents a legal perspective of the cyber space and the activities within it. Topic such as Infractions in cyberspace, Investigating and prosecuting crime in cyberspace, on-line contracts, Trademark issues in Cyberspace, On-line service liability issues, Privacy issues, Laws tackling cyber criminality as well as an examination of some international bodies working to curb cyber criminality are covered with this course.

SEMESTER IV

MIT 202: Probability and Statistics

This course introduces students to the nature and purpose of probability and mathematical statistics. It covers topics such as Sample Mean and Variance, Random Experiments, Mathematical Probability, Random Variables, Discrete and Continuous Distributions; Mean and Variance of a Distribution; Binomial, Poisson and Hyper-geometric Distributions; Normal Distribution; Random Sampling, Random Numbers; Estimation of Parameters; Confidence Intervals; Testing of Hypotheses; Decisions; Quality Control; Acceptance Sampling ; Goodness Fit. X2- Test.

SIT 218: Web Technologies

This course covers the technologies that are involved in the representation of information on the web. Technologies such as Hyper Text Mark-up Language (HTML), Cascade Style Sheet (CSS), JavaScript for client-side scripting and a server-side scripting programming language such as PHP will be covered from a practical perspective. A prerequisite for this course will be a D+ in the Computer programming II course.

SIT 214: Scientific Research Methods

This course introduces students to the concepts and practices of social research, its history, importance and applications. Topics such as sampling, measurements, design and analysis with respect social research will be covered in this course. A prerequisite for this course will be a D+ in the Introduction to Research Methodology course.

Electives from the School of Business

CODE	TITLE	Credit Value	COMMENTS

ACC102	Principles of Accounting	4	
BUS101	Principles of management	4	
BUS102	Fundamentals of Business Economics II	4	
BUS103	Fundamentals of Business Economics I	4	
FIN102	Principles of Finance	4	
BUS214	Small Business Management	4	
BUS218	E-Business	4	
MKT201	Customer Service Management	4	

Sophomore students are required to register and validate a freshman or Sophomore Year course from the School of Business. Any introductory course on accounting, management and or finance will suffice. Students are required to consult the handbook for the School of Business and talk to the corresponding course instructors for orientation.

SIT 208: Tutored Projects

This course runs throughout the sophomore year and will be examined through a series of working sessions, project write-up and presentation. The course drills students on what it takes to deliver a project and encourages them to make use of the knowledge acquired after two years of studies in the School of IT.

3. Junior Year

SEMESTER V

SIT 333: Systems Programming

This course trains students on the issues involved in developing system-dependent applications. Topics such as file manipulations, working with vendor and third party programmers' libraries (static and dynamic), programming for specific hardware, device driver and network programming are treated within this course. The course is project based.

SIT 335: Mobile Device Programming

The course aims at giving students the tools to design and develop mobile apps, and publishes them online mobile application stores. It provides an introduction to mobile phone and tablet development in general, and a good understanding of either the Android, the iOS or the windows platform in particular; and also the concept of hybrid apps. The diverse resource constrained hardware environments, the large number of software platforms, and quickly changing APIs are among the features that make mobile development challenging and rewarding. Therefore, topics such as file manipulations, interaction with programmable features of a mobile device, working with vendor and third party programmers' libraries (static and dynamic) and interfacing with mobile device are treated within this course. The course is project based.

SIT 435: Software Engineering

This course provides an academic backing to software engineering concepts which students would have exploited during the work experience course. The course delves into questions like: Why do so many software projects fail? What are the leading software development technical and management practices?. what can be done to extract maximum value from technical reviews? Etc. It covers the traditional phases of software engineering such as: specification, requirement, design, implementation, verification and validation, documentation and packaging.

Professional Certifications

This course prepares students for one or more internationally recognized professional certifications examinations. It is the students' responsibility to register and take the certification exams. However, an end of course evaluation will be carried out and recorded in the students' Transcript. One or two

of the following certifications will be covered this Academic Year:

SIT 391: Oracle Certified Associates (OCA)

SIT 393: Cisco Certified Network Associate (CCNA)

SIT 395: Comptia Security +

SEMESTER VI

SIT 302: Industrial Placement

This course initiates and integrates students into professional life. The course is taken off-campus in any IT related firm or organization under strict supervision from the school of IT. Throughout the semester, students are expected to appear at their place of work and spend a full working day, dressed professionally and carry out tasks as required by the organization. Regular faculty visits from the school of IT shall be performed, to facilitate continuous assessment of the students' performance. At the end of the internship, the students are expected to present and defend an internship report which they would submit to the school.

4. Senior Year

SEMESTER VII

SIT 433: Advanced Data Structures and Algorithms

This course provides a rigorous view into data structures and algorithms as used in computer programming. Though practical exercises, the course explores traditional and contemporary problems in data structures and algorithms, performance analysis as well as algorithm optimizations. Topics include search tree construction, tree balancing techniques, algorithms from graph theory and computational geometry, string matching algorithms, skip lists and hash tables, and techniques for parallel algorithms.

*** BUS 405 Project Management– From the School of Business**

Students are advised to take the project management course from the School of Business. The course code is BUS 405 and it is titled Project management. PMP certification courses or short courses on project management, which are offered through our online Programme, are equally acceptable substitutes.

SEMESTER VIII

Electives from any other school

School of Business

CODE	TITLE	Credit Value
ACC305	Accounting Information System	4
BNF303	E-Banking and instruments of payment	4
BUS303	Management Information System	4

Senior Year's students are required to register and validate a course, relevant to their specialty, from either the SMS or SENG or SANR. Any sophomore or junior year course will suffice. Students are urged to consult the handbook for the appropriate school and talk to the corresponding course instructors for orientation. Students can take any other courses as approved by their corresponding departments.

(SIT 402): Report writing and Presentations

This course drills students on how to write reports and boosts their confidence in presentations. The course is divided into two parts 40% lectures on types of report, report writing style, formatting

reports, and more and 60% of practical which will be carried out during the annual trade/academic fair. Students are expected to prepare and present on various topics during the morning / academic sessions of the fair.

(SIT 410): Senior Project

As a partial fulfillment of the requirement for graduation, the student(s) plan and develop a project in which he/she demonstrates the ability to analyze and synthesize information. He/she learns to effectively communicate the results of his/her study through a dissertation of work experience project not more than 30 pages. The work must fit within the framework of the institutional priorities and research norms. The student(s) will be expected to produce 4 copies, 3 for the panel of examiners, and one for himself/herself. After examining the project, the student(s) will be required to effect corrections as required by panel if he/she wants copies to be kept in CUIB library.

Note: *Senior year courses are project based and if possible, would be taught in line with students' final year project.*

XVII. CUIB FACILITATING SERVICES

Library

The CUIB library has a rich collection of academic materials (textbooks, journals, manuscripts, etc.) which can be assessed by students, faculty and staff. The library can also be assessed by the wider public. It is opened Monday to Friday from 8:00 am – 4:00 pm. For more information, contact the Office of the Librarian (CUIB).

Office of Examination and Records

This office of Examination and Records is one of the most important offices in CUIB given its strategic role. The office is charged with the following task: i) organize the all CUIB examinations in collaboration with the Provost; ii) produce student academic transcripts; iii) collaborates with all the units of the University to obtain information required to generate all types of records. For more information, contact the office of Examination and Records.

Pastoral and Other Services

The Pastoral Arm of CUIB takes care of the following services:

- i. Liturgy:** aspects of spiritual wellbeing of all members of CUIB community including daily masses, sacraments, retreats, and the students choir (Scolaris Cantores).
- ii. EoC services:** concerned with social meetings, academic debates, motivational and carrier talks, interdependent study groups and entrepreneurial projects etc.
- iii. Counseling:** helping students out with their emotional, psychological, spiritual problems, etc.
- iv. Recreation and socio-cultural activities:** facilitate and plan recreational activities as well as supervise the creation and functioning of student clubs.
- v. Health center:** Help to improve Faculty, Staff and Student's health as well as that of the Community. Also enhance proper hygiene and Sanitation in both Campuses.
- vi. STUGA:** The CUIB Student Government Association (STUGA) exists to bridge the gap between students and Faculty and the University Administration. STUGA cooperates with the office of pastoral services in the organization of all student activities; acts as a link between students and for more information on STUGA activities, contact their office on Campus

For more information on Pastoral Services, contact the office of Pastoral Services or Rev Fr. Pascal Siben, Moderator, Campus Ministry.

CERI Office

CERI was created to deliver a virtual and real-time entrepreneurial ecosystem to support training and development of entrepreneurs, leaders and innovators within the science, technology, engineering and mathematics disciplines. For more information, contact: Director, CUIB-CERI.

CUIB Information Center

CUIB Information Centre is here to provide advice, direction and information on all University services and activities in close liaison with other staff, that is, we provide answers to any questions you may have about CUIB.

CUIB E-Communication

As an Extramural Centre created to meet Vision 2020 of the Institution, CUIB TV participate in the growth of innovation, providing audio-visual services to the University and external public and equally serve as a learning platform for our students.

Division of Intramural activities

Prepare Students, Staff & Faculty to become morally and spiritually responsible leaders who demonstrate critically, wisely and skillfully for the good of our community.

Bookshop

The bookshop operates as a service through which the University (Faculty, Staff and students) and the community (individuals, parishes and organizations) can procure religious and self-help books, religious articles, and stationery. Secular books can also be procured through bookshop on special orders at the bookshop. Bookshop also operates an outreach branch in Kumba. It is the intention of the university to involve students of Marketing to expand the services of bookshop to assist in the diffusion of materials. For more information, contact: CUIB-CERI Office.

St. Martha Faculty, Staff and Students Club

St Martha CUIB-CERI restaurant is one of the arms of CERI with the main aim of serving the university community as well as the wider public high quality food on a timely basis and at affordable prices. The restaurant sells varied snacks, drinks, and a multitude of dishes from Cameroonian, African and European dishes. It is a perfect restaurant to experience Economy of Communion (EoC), whether you like food, or story-telling or just sitting and thinking best, or a pleasant mixture of them all. The restaurant serves a dish (irrespective of choice) to students at 400 FRS and to others at 500 FRS. The restaurant opens daily from Monday to Friday from 09:00 – 16:00 with a short closure from 11:45 – 12:30 during EoC hour. For more information, contact: CUIB-CERI Office.

Office of Institutional Advancement & Development

The office of Outreach and Engagement has as its mission to promote and facilitate academic and cultural exchanges, research, vocational and industrial linkages between CUIB and the community, and other local and international institutions.

Student Financial Information

All financial transactions involving physical cash is carried out through any of the banks indicated below. Students pay fees in any of the branches of the banks where the University has accounts, and then present receipts of payment to the Office of Finance for necessary clearances. Financial payments may also be made at the Finance office of CUIB. Students should check with the finance office for details about any payments they wish to make. Below are the details of the University's

bank accounts.

Table 4. Different CUIB bank accounts

<i>BANK</i>	<i>ACCOUNT NAME</i>	<i>ACCOUNT NUMBER</i>
BICEC	CATHOLIC UNIVERSITY INSTITUTE OF BUEA	10001 06842 434956 42001/50
ECOBANK	CATHOLIC UNIVERSITY INSTITUTE OF BUEA	10029-00025- 01014756678-11
NFC BANK	CATHOLIC UNIVERSITY INSTITUTE OF BUEA	10025-00043- 16401044571-96

IT Services & Wifi On Campus

The CUIB IT offers wide range of services that gives a conducive atmosphere of learning for students on campus. These services include;

1. Fax
2. Internet Access
3. Telephone calls (National & International)
4. Printing (Black & white)
5. Scanning (Picture & document)
6. Documentation (Binding, Photocopy, Professional card, etc.)
7. Wireless (for Staff, Faculty and Non-staff)
8. Internet
9. Corporate Email.



CATHOLIC UNIVERSITY INSTITUTE OF BUEA (CUIB)



SCHOOL OF INFORMATION TECHNOLOGY 2017-2018

INTRODUCTION

The Senior Project Manual in the School of IT is an indispensable tool for graduating students who must carry out a project, present and defend a write-up of the project before a panel of Faculty Members. The project could be either research based or a development project that focuses on answering questions and or offering potential solutions to significant problems encountered by our stakeholders in their work environment. These stakeholders are primarily the various members of our local community who make use of information technologies in their everyday activity.

This Manual addresses questions such as what is required to successfully carry out a Senior Project? What constitutes plagiarism? How students should work with their advisers and supervisors as well as their interaction with the review board? What should go into the write-up? And how students should plan their presentation and defense.

Getting Started

Where to start is usually the biggest hurdle and most students think it is all about the write-up and defense. The Biggest obstacle lies in the fact that students wait until their Senior Year to identify the topic for their senior project. That should not be the case. It is important to start the thinking process early enough. The Second Semester of the Sophomore Year is an appropriate time. Ask

other people what they think about your project topic. Remember that the project's community impact is vital. So talk to people outside the university.

Identifying and creating a rapport with your supervisors and advisers is the next big step. Keep sentiments aside. Choose supervisors who are working in the same topic/area of interest. It is possible to have multiple supervisors for your project but more than three will be considered an excess. Your advisers should be people who are interested in the work you are doing. Preferably members of the community/group of persons your project intends to impact.

Keep a journal with multiple backups of everything related to your project. It is common for students to wake up on the morning of the defense and complain about data loss. Document every reference, modifications, tentative results, drafts, etc. as soon as they are made for you will not remember then later on. You may think you have a lot of time left but truly time flies.

The final step of the thinking phase is to complete and sign the project proposal which must be signed and approved by at least one of the supervisors as well as the Dean or Special Assistant to the Dean. This must be done at least four months before the defense date.

The Write-up

It is important to maintain some uniformity in the senior project write-ups within the School of IT. In this regard, the general guidelines for the write-up are as follows:

Maximum length – 75 pages for the main text only

Margins – 1.5 inches on the left top and bottom. 1 inch on the right

Font Size – 12

Font Type – Times New Romans

Lines Spacing – 1.5

Paragraph Indentation – 0.75 inches

Order of Materials – Title Page, Signature Page, Acknowledgements, Signed Project Proposal, Table of Content, List of Tables, List of Figures, Abstract, The Main Text, References, Appendix.

Preliminary Pages – These include all pages before the main text.

Page Numbering – Should be chronological at the bottom right corner of the page. Preliminary pages are numbered with lower case roman numerals. There are no page numbers on the Title, Signature and Acknowledgements pages but they are assumed to be i, ii, and iii.

Abstracts should be between 150 and 250 words. It should provide a summary of the overall study stating the purpose of the study, the methods used, results description and a short abstract conclusion. Chapter 1 of the main text is usually the introduction which should be 5 – 7 pages. It gives the background and setting needed to put the problem into proper context and justifies the need for the study. It equally provides a statement of the relevant assumptions made if any and logically lead to a clear statement of the problem, followed by the purpose of the study / project as well as the objectives that will be pursued.

Chapter 2 reviews the relevant and related studies / projects done by others, presenting their objectives, theories, methodology and results. Comparisons should be made to what your own project is all about to highlight, in strong terms, the uniqueness of your project. In about 9 – 15 pages, Chapter 3 describes your methodology by presenting conceptual models in the various phases of the project / study. The chapter also includes the project / research design, instrumentation, data collection, data analysis, etc. Students are advised to collaborate closely with their supervisors in writing this chapter.

Chapter four of the main text section reports all the results and findings of your study. It covers the data presentation and analysis of the findings. In Chapter five, the facts found / impressions and opinions on the impact of the project in the context of its application are presented. Recommendations and suggestions are made and conclusions are drawn, based on the findings.

Complete bibliographic information for all references cited in the text should be provided in APA standards. The appendices include installation and user manuals, copies of all correspondence, special lists, etc.

The Review Board

The review board constitutes specialists of diverse disciplines who shall examine, primarily for ethical concerns, and approve the study / project before it is carried out. Students should work with their supervisors to ensure that their projects are approved.

The printing and binding of the project write-up is handled by the University's Center for Entrepreneurship, Research and Innovation CUIB-CERI.

Deadlines will be strictly followed and extensions for deadlines will only be granted in properly documented circumstances of ill health or severe personal problems.

The supervisor and a second marker on or before the defense shall mark the write-up. External examiners shall have the opportunity to look at the write-up.

The unacknowledged use of other people's work – Plagiarism, is considered a capital crime and has serious consequences.

The Defense

This is a 45 minutes presentation of the project by the student to a panel of specialists and a jury of peers, hobbyist, friends and family. The student is expected to demonstrate a mastery of the nooks and hooks of the project / study. This will be tested by the question and answer session that follows the student's 20 minutes monologue. Power point presentations and or real life demonstration of artifacts should be used.

Further Guidance

The British Sociological Association's Statement of Ethical Practice:

<http://www.socresonline.org.uk/info/ethguide.html>

Research Ethics for Projects Involving Data Collection with Human Participants

<http://www.socscidiss.bham.ac.uk/s8.html>

University of Warwick, Centre for Lifelong Learning. Dissertation Guidelines for Undergraduate Study, 2010

**Contacts of Faculty and Staff of the School
of Information Technology**

SN	NAME	STATUS	SPECIALTY	PHONE	EMAIL
1	Dr. Felicitas Mokom	Dean/ Full Time	Artificial Intelligence	699-641-019 /679-925-980	fmokom@cuib-cameroon.net
2	Mr. Gilemond Nchiwo	Special Assistant to the Dean / Full Time	Networks and Systems Engineering	674-876-247	gnchiwo@cuib-cameroon.net
3.	Mm. Tiako Fani Michele Doriane	Full Time	Software Engineering	693-877-019 / 680-182-060	tiakofani@cuib-cameroon.net
4.	Mr. Ngatchu Damen	Full Time	Computer Engineering	675-467-404/ 695-823-154	ndamen@cuib-cameroon.net
5.	Mr. Achankeng Peter	Full Time	Software Engineering	677 – 196 – 252	apeter@cuib-cameroon.net

THE CUIB STATEMENT OF DIRECTION

I believe that God created all things and in him I live and move and have my being (Acts 17:28). Therefore, to succeed in this life, I must put God First, in the middle and in the end of all my activities and life as a member of the CUIB family.

I believe in the EoC Philosophy which fosters team work, and that the way forward for humanity is to develop a culture of sharing versus that of having, a culture of inclusiveness and diversity than that of segregation. Therefore, I believe in the Economy of Communion Philosophy.

I believe that God endowed man and woman with intelligence and freedom to share in his work of creation. Therefore, I believe that in order to be co-creator in a responsible way, I must work hard to be a true entrepreneur, a job creator, and a giver through community engagement and volunteerism.

I believe in an educational system that is not only about entitlement, matricule and certificates, but one that is practical, transformative and solution-oriented to solve real life problems.

I believe in honesty and truthfulness, without which I cannot win the respect and confidence of my fellow men and women.

I believe in a sound mind, in a sound body and in physical education and sports that develop these qualities.

I believe that we build a culture of innovation and creativity based on three principles: Celebrate it when it is successful; reward it when it is successful; and learn from failure by not making the same mistakes twice because failure is a growth in perfection.

I believe in obedience to law because it protects the rights of all. Therefore, I must foster the two main virtues of an entrepreneur: Love and Justice.

I believe in the human touch and servant leadership philosophy, which cultivates empathy with my fellow men and women and mutual helpfulness that brings happiness for all.

I believe in my Country, because it is my own home, and that I can best serve that country by “acting justly, loving tenderly, and walking humbly with my God.” (Micah 6:8).

And because CUIB men and women believe in these values, I believe in CUIB and love it.