



# SIIMT University College

Accredited By GTEC | Affiliated By UCC

## BSc INFORMATION TECHNOLOGY

Course Outline | Course Structure

Requirements | Fees | Hostel | Job opportunities



# Bachelor of Science in INFORMATION TECHNOLOGY (4 Years)

Affiliated to University of Cape Coast

## • COURSE DESCRIPTION

The Bachelor of science in Information Technology program prepares students to meet the information and communication technology needs of government, business, healthcare, universities, and other kinds of organizations. Information Technology (IT) is the application of computers and telecommunication systems to produce, manipulate, store, organize, retrieve, and transmit data. It involves development, installation, implementation, management, and maintenance of computer hardware and software within companies, universities, and other organizations.

## • AIM

The main aim of the programme is to produce graduates who will be resourceful in ensuring academic excellence and professional competence in the field of digital technology in Ghana and abroad.

## • OBJECTIVES

- Appreciate the scientific principles and understand the underlying integrated (social, economic, political, cultural) nature of ICT and therefore not limit it to just a collection of hardware and software.
- Be knowledgeable about the constant changing world and a means of aligning the dynamic nature of digital technology (innovation) to business of the future.
- Be knowledgeable in the skills of Software Engineering
- Have the understanding on the programming techniques, principles and practice in Software Engineering;

- Have the knowledge and skills in Web Technology and professional issues to start their career as Web Technologists;
- Provide a totally integrated solution for the design, installation and operation of complex computer systems focusing on computer networks.
- Demonstrate understanding and capability in applying theory and model which are the fundamentals in identifying and analysing a problem, designing systems, construction, implementation, verification and documentation.

• **FEE STRCUTURE**

CATEGORY	FEES PER SEMESTER
Ghanaian Students	GH¢ 3,200
Foreign Students	USD 600

*Mature Students Exam fee GHS 500 (only 25 year and above eligible)*

**Note - Fees can be paid in installments**

• **HOSTEL FACILITIES**

Students who are looking for accommodation (Ghanaians and non-Ghanaians)

**HOSTEL FEE - GHS 1100 per semester**

## • **MINIMUM REQUIREMENTS FOR ADMISSION TO FIRST DEGREE PROGRAMMES**

- Senior Secondary School Certificate Examinations (SSSCE),
- West African Senior School Certificate Examination (WASSCE)
- General Business Certificate Examination (GBCE)

The general requirements for admission of WASSCE, SSSCE and GBCE candidates to first degree programmes are three (3) credit passes in three core subjects and three (3) credit passes in three relevant elective subjects.

### ✓ **For Top-up to Level 200**

- Academic Diploma from SIIMT
- ABCE certificate
- Transfer certificate from another University (only applicable to transfer admissions)

### ✓ **For Top-up to Level 300**

- First Degree with Academic Transcript (at least 2<sup>nd</sup> Class Lower) in any relevant to IT degree
- HND Certificate with Academic Transcript (at least 2<sup>nd</sup> Class Lower) relevant to IT

### ✓ **For SSSCE Candidates:**

Credit Passes (A-D) in

- Six (6) subjects comprising three core subjects, including English Language and Mathematics
- With Three (3) relevant elective subjects.

✓ **For WASSCE Candidates:**

Credit Passes (A1-C6) in

- Six (6) subjects comprising three core subjects, including English Language and Mathematics,
- With three (3) relevant elective subjects.

✓ **For GBCE Candidates:**

Credit Passes (A-D) in

- Six (6) subjects comprising three core subjects including English Language and Mathematics
- With three (3) relevant elective subjects

✓ **For General Certificate of Education (GCE)**

Advanced Level Candidates Passes in

- Three (3) subjects (at least, one of the passes should be Grade D or better).
- Applicant must have had credit passes (Grade 6) in five GCE Ordinary Level subjects including English Language, Mathematics and a Science subject (for non-science students) and an Arts subject (for Science students).

✓ **For Higher National Diploma (HND) Candidates**

- Applicant must have graduated with a good HND certificate (i.e. at least 2nd Class Lower Division).
- Other Diploma qualifications from elsewhere assessed to be equivalent to HND may be similarly considered

## ✓ **For Advanced Business Certificate Examination (ABCE) Candidates**

Full Diploma Certificate in ABCE.

- Applicant must have had credit passes in five (5) subjects including English Language, Mathematics, Integrated Science or Social Studies in the General Business Certificate Examination (GBCE) or Senior Secondary School Certificate Examination (SSSCE) or West African Senior Secondary School Certificate Examinations (WASSCE).
- ABCE candidates may be considered for admission at level 200 of a degree programme.

## ✓ **For Mature Students' Entry**

Mature student entry avenues to tertiary education provide opportunities for people who could not do so earlier in their lives to further their education at the tertiary level after some years in the workplace.

- The applicant must be at least 25 years old
- Birth certificate or any legitimate documentary proof of date of birth which is at least 5 years old at the time of application
- Applicant must pass Mature Students' Entrance Examinations conducted by the SIIMT (English Language, Mathematics and an Aptitude Test)

## • COURSE STRUCTURE

<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
UWC 101	Communication Skill – I	3
UWF 101	Foreign Language French	3
BIT101	Introduction of Information Technology	3
BIT103	Basics of Accounting	3
BIT105	African Studies	3
BIT107	Calculus- I	2
	<b>TOTAL</b>	<b>16</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
UWC102	Communication Skill – II	3
BIT102	Logic and Critical Thinking	3
BIT104	Fundamentals of Programming	3
BIT106	Basic Digital Electronics	3
BIT108	Principle of Microeconomics	3
BIT110	Calculus- II	2
	<b>TOTAL</b>	<b>17</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT201	Computer Organization and Architecture	3
BIT203	Object Oriented Programming – I	3
BIT205	Statistics and Probability	3
BIT207	Data Structure & Algorithm	3
BIT209	Principle of Management	3
BIT211	Linear Algebra	3
	<b>TOTAL</b>	<b>18</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT202	Data communication –I	3

BIT204	Object Oriented Programming – II	3
BIT206	Operating System Concepts	3
BIT208	System Analysis and Design	3
BIT210	Web Technology-I	3
BIT212	Database Management System	3
	<b>TOTAL</b>	<b>18</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT301	Data communication –II	3
BIT303	Software Engineering	3
BIT305	Computer Graphics	3
BIT307	Web Technology-II	3
BIT309	Management Information System	3
BIT311	Organization behaviour	3
	<b>TOTAL</b>	<b>18</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT302	Network and System Administration	3
BIT304	Human Computer Interaction	3
BIT306	Data Warehouse & Data Mining	3
BIT308	Mobile Application Development	3
BIT310	Research Methods in Computing	3
BIT312	Mobile Computing Technologies	3
	<b>TOTAL</b>	<b>18</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT401	Introduction to Data Science	3
BIT403	Computer and Communication Security	3
BIT405	IT Entrepreneurship	3
Electives	Business Intelligence and Data Analytics	3



	Game Applications Development Advanced Database Systems	
BIT413	Project-I	3
	<b>TOTAL</b>	<b>15</b>
<b>Code</b>	<b>Name of the Subject</b>	<b>Credit</b>
BIT402	Emerging Business Technologies	3
BIT404	IT Project Management	3
BIT406	Ethical and legal Issues in Computing	3
	Embedded System  IT Services Management e-business & e-commerce	3
BIT414	Project - II	3
	<b>TOTAL</b>	<b>15</b>

## JOB OPPORTUNITIES

- **Database Administrator (DBA)**  
Database administrators maintain and secure a company's vital data, including such as financial information and client records.
- **Project Manager**  
Oversee IT project teams, developing work plans to see jobs through, on time and under budget from start to finish.
- **IT Business Analyst**  
Bridge the gap between business stakeholders and other IT professionals to develop and modify practical systems solutions.
- **Computer Network Support Specialist**  
Analyse and troubleshoot an organization's computer network problems, and perform routine backups and maintenance to keep the systems running smoothly.

- **Systems Analyst**  
Analyse how well a business's IT systems fit its needs — and implement creative solutions when those systems need improvement.
- **Application Developer**  
Take an app from concept to reality as you design and code software for computers and mobile devices.
- **Computer Network Architect**  
Design, review, update, and secure network systems for businesses.
- **Network Administrator**  
Maintain the hardware and software for a business's network and file servers.
- **Certified Computer Technician**  
A+ certified technicians inspect, diagnose and repair hardware and software for both individual computers and networks.
- **Webmaster**  
Maintain both the content and design of websites across all platforms, coding new functions as the need arises.
- **Computer Forensic Specialist**  
Investigate, gather, and analyse digital evidence from electronic devices for law enforcement investigations and courtroom trials.
- **Web Designer**  
Create, develop, and code web pages for computers and mobile platforms.