

BSc in Computer Science

The BSc in Computer Science is a four-year programme which aims to equip graduates with a stronger mathematical and technical skills and knowledge to take on appropriate positions in industry upon graduation, and to grow into leadership positions or to pursue research or graduate studies in the field. Graduates of the programme can position themselves in a large number of exciting fields of works, including digital animation, knowledge engineering, software architecture, web design, digital media, and security consultancy.

By the end of the programme, graduates should be able to: understand and contribute to the scientific, mathematical and theoretical foundations on which information technologies are built; explain and apply appropriate information technologies and employ appropriate methodologies to help an individual or organization achieve its goals; Anticipate the changing direction of information technology and evaluate and communicate the implications of these changes to an individual or organisation; and live and work as contributing, well rounded, members of society.

Applicants must have one of the following:

SSSCE: Aggregate score of 24 or better. Credit passes (A-D) in 6 Subjects including Core Mathematics, Core Science & English, plus Physics or Elective Mathematics.

WASSCE: Aggregate score of 24 or better. Credit Passes (A1-C6) in 6 Subjects including Core Mathematics, Core Science & English, plus a pass of C6 or better in Physics or Elective Mathematics.

GCE A'Level: Aggregate 12 or better with a pass of D or better in Physics or Mathematics.

Diplomas/Certificates from local and foreign institutions authenticated by the National Accreditation Board (NAB).

Mature Students must be at least 25 years at the time of applying and must write a qualifying exam and score an average of 50% in it. They must also have relevant working experience plus credit passes in Mathematics and English.

HND holders in relevant disciplines may be admitted to Level 200.

Certificate in Information and Communication Technology from GIMPA with an average score of not less than 55%. They must equally satisfy the requirements above for entering a tertiary institution.

COURSES OFFERED

First Semester (Level 100)

CODE	COURSE
GSOT 103	Programming Fundamentals
GSOT 105	Fundamentals of Computing
GSOT 101	Calculus I
GBUS 102	Economic Science
GBUS 101	Communication Skills

Second Semester (Level 100)

CODE	COURSE
GBUS 201	Accounting Foundations
GSOT 106	Object-Oriented Programming I
GSOT 102	Calculus II
GBUS 102	Communication Skills II
GBUS 101	Reading Seminar in Humanities

Level 200 (Second Year)

GSOT 201	Discrete Mathematics	GSOT 202	Web Technologies
GSOT 203	System Analysis and Design	GSOT 204	Probability and Statistics
GSOT 205	Object Oriented Programming II	CSCI 202	Database Systems
GSOT 207	Computer Org. and Architecture	GSOT 208	Linear Algebra
GBUS 205	Management and Org. Behaviour	GSOT 210	Electronic Circuits

Level 300 (Third Year)

CSCI-301	Computing Theory	CSCI 302	Systems Modelling & Simulation
GSOT 303	Operating Systems	CSCI 304	Numerical Methods
GSOT 305	Data Com. & Networks	GSOT 304	Software Engineering
GSOT 301	Mobile Programming	GSOT 306	Adv Data Com. & Networks
CSCI 303	Data Structures And Algorithm	GSOT 302	Human Computer Interaction
CSCI 305	Advanced Probability & Statistics	CSC-306	Adv Data Structures & Algorithms

Level 400 (Fourth Year)

CSCI 401	Compiler Design	GSOT 402	Operations Research
GSOT 403	Management Information Systems	CSCI 402	Survey of Programming Languages
GSOT 403	Ethical & Legal Issues in Computing	CSCI 404	Artificial Intelligence
CSCI 403	Computer Graphics	CSCI 406	Real-Time and Embedded Systems
GSOT 400	Project I Elective 1	GSOT 400	Project II Elective 2

Electives

CSCI 420 Parallel & Distributed Systems

SOT 430 Data Warehousing and Mining

GSOT 420 Wireless Networks

CSCI 440 Robotics

ICTE 302 IT Project Management