

Bachelor of Technology in Software Engineering

Programme details:

The programme consists of core (required) and elective modules as indicated below. Some modules may have pre-requisites (i.e. may require students to pass another module or set of modules first). Some modules may be co-requisite (such modules are required to be taken together). The number at the end of the module in parenthesis indicates the credit load of the module. 1 credit is equal to 10 hours of learning (guided, in-class and independent combined); therefore a 10 credit module requires an average of 100 hours of learning from the student.

Core modules:

- C5-IC1-23: Introduction to Computing and Programming (MS Office & Programming Basics) (15)
- C5-PES-23: Professional, Ethical, and Social Issues in Computing (15)
- C5-MAT-23: Essentials of Mathematics (15)
- C5-PSE-23: Principles of Software Engineering (15)
- C6-IC2-23: Programming with C (15)
- C6-DSE-23: Discrete Structures (15)
- C6-CCO-23: Calculus for Computing (15)
- C6-LAL-23: Linear Algebra (15)
- C7-SEN-23: Software Engineering (15)
- C6-INS-23: Introduction to Software Security (15)
- C6-WDD-23: Web Design Development (15)
- C6-PC+ -23: Programming using C++ (15)
- C7-SDP-23: Software Development Project (15)
- C7-IJP-23: Introduction to Java Programming (15)
- C7-DMS-23: Database Management Systems (15)
- C7-DAA-23: Data Structures and Algorithms (15)
- C7-SPA-23: Software Architecture and Patterns (15)
- C7-SAD-23: Software Administration (15)
- C7-PAS-23: Probability and Statistics (15)
- C7-SPM-23: Software Project Management (15)
- C7-PUP-23: Programming using Python (15)

- C7-SRA-23: Software Requirements Analysis and Design (15)
- C7-UID-23: User Interface Design and Implementation (15)
- C7-PPR-11: Professional Practice (60)
- C7-STG-23: Software Testing (15)
- C8-PRO-23: Project (30)

Elective Modules:

- C7-PDS-23: Parallel and Distributed Software Engineering (15)
- C7-SQA-23: Software Quality Assurance (15)
- C7-EAI-23: Entrepreneurship and Innovation (15)
- C8-SQC-23: Software Quality Control (15)
- C8-STM-23: Software Testing and Maintenance (15)
- C8-AIN-23: Artificial Intelligence (15)
- C8-REG-23: Requirement Engineering (15)

Recommended full-time study path (4 years)

Semester 1

- C5-IC1-23, C5-PES-23, C5-MAT-23, C5-PSE-23

Semester 2

- C6-IC2-23, C6-DSE-23, C6-CCO-23, C6-LAL-23

Semester 3

- C7-SEN-23, C6-INS-23, C6-WDD-23, C6-PC+ -23

Semester 4:

- C7-SDP-23, C7-IJP-23, C7-DMS-23, C7-DAA-23

Semester 5

- C7-SPA-23, C7-SAD-23, C7-PAS-23, C7-SPM-23

Semester 6

- C7-PUP-23, C7-SRA-23, C7-UID-23
Select One (C7-PDS-23, C7-SQA-23, C7-EAI-23)

Semester 7:

- C7-PPR-11

Semester 8

•C7-STG-23, C8-PRO-23 Select One (C8-SQC-23, C8-STM-23, C8-AIN-23, C8-REG-23)

Admissions Criteria

1) Senior Secondary School Certificate Examinations (SSSCE), West African Senior School Certificate Examination (WASSCE) and General Business Certificate Examination (GBCE) Bachelor of Science in Cyber Security & Risk Management.

2) 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.

i. SSSCE Candidates: Credit Passes (AD) in six (6) subjects comprising three core subjects, including English Language and Mathematics, plus three (3) relevant elective subjects.

ii. WASSCE Candidates: Credit Passes (A1-C6) in six (6) subjects comprising three core subjects, including English Language and Mathematics, plus three (3) relevant elective subjects.

iii. GBCE Candidates: Credit Passes (AD) in six (6) subjects comprising three core subjects including English Language and Mathematics plus three (3) relevant elective subjects.

3) For enquiries and more information please visit our website: www.ghana.bothouniversity.com

