# LIST OF COURSES FOR BSC CYBER SECURITY

## FIRST YEAR- LEVEL I COURSES

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| **S/N** | **Course Code** | **Course Title** | **Credits** | **Status** |
| **1** | CSC 1303 | Introduction to Computer Science | 3 | Core |
| **2** | ITC 1203 | Fundamentals of IT | 2 | Core |
| **3** | CST 1311 | Statistics for Physical Sciences and Engineering  | 3 | Core |
| **4** | MTH 1301 | Elementary Mathematics I | 3 | Core |
| **5** | PHY 1210 | Mechanics | 2 | Core |
| **6** | PHY 1220 | Electricity and Magnetism | 2 | Core |
| **7** | CHM 1201 | General Chemistry I | 2 | Required |
| **8** | CHM 1107 | General Practical Chemistry I  | 2 | Required |
| **9** | BIO 101 | General Biology I | 2 | Elective |
| **10** | BIO 107 | General Biology Practical I | 1 | Elective |
| **11** | GSP 1201 | Use of English | 2 | Core |
| **12** | SWE 1301 | Introduction to Problem Solving | 3 | Core |
| **TOTAL** | **26** |  |
| **S/N** | **Course Code** | **Course Title** | **Credits** | **Status** |
| **1** | CST 1304 | Introduction to Computer Programming | 3 | Core |
| **2** | CST 1301 | Introduction to Application Packages | 3 | Core |
| **3** | MTH 1303 | Elementary Mathematics III | 3 | Core |
| **4** | PHY 1230 | Behaviour of Matter | 2 | Core |
| **5** | GSP 1202 | Use of Library, Study Skills and ICT | 2 | Core |
| **6** | CBS 1202 | Fundamentals of Cybersecurity | 2 | Core |
| **TOTAL** | **15** |  |

## SECOND YEAR- LEVEL II COURSES

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| **FIRST SEMESTER COURSES** |
| **S/N** | **Course Code** | **Course Title** | **Credits** | **Status** |
| **1** | CBS2201 | Fundamentals of Cyber Security II  | 2 | Core |
| **2** | CBS2203 | Information Security Policy | 2 | Core |
| **3** | CSC2253 | Data Structures and Algorithms | 2 | Core |
| **4** | CSC2323 | Introduction to Discreet Mathematics | 3 | Core |
| **5** | SWE2301 | Introduction to Software Engineering | 3 | Core |
| **6** | MTH2301 | Mathematical Methods  | 3 | Core |
| **6** | GSP2204 | Foundation of Nigerian Culture, Government, & Economy | 2 | Core |
| **7** | GSP2206 | Peace Studies & Conflict Resolution | 2 | Core |
| **8** | GSP2201 | Use of English | 2 | Core (D.E) |
|  |   | Minimum (Regular) | 19 |  |
|  |  | Minimum (DE) | 21 |  |
| **SECOND SEMESTER COURSES** |
| **S/N** | **Course Code** | **Course Title** | **Credits** | **Status** |
| 1 | CBS2202 | Information Security Engineering  | 2 | Core |
| 2 | CBS2204 | Biometric Security | 2 | Core |
| 3 | SWE2314 | Computer Programming II | 3 | Core |
| 4 | CSC2204 | Analysis of Algorithms | 2 | Core |
| 5 | CSC2210 | Operating System I | 2 | Core |
| 6 | CSC2206 | Computer Architecture and Organization I | 2 | Core |
| 7 | SWE2315 | System Analysis and Design | 3 | Core |
| 8 | MTH2205 | Linear Algebra I | 2 | Core |
| 9 | GSP2205 | Logic and Philosophy  | 2 | Core |
| 10 | GSP2202 | Use of Library, Study Skills & ICTs | 2 | Core (DE Only) |
|   |  | Minimum (Regular) | 20 |   |
|   |   | Minimum (DE) | 22 |   |

## THIRD YEAR- LEVEL III COURSES

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| FIRST SEMESTER COURSES |
| **S/N**  | **Course Code**  | **Course Title**  | **Credits**  | **Status** |
| 1 | CBS3201 | Introduction to Digital Forensics | 2 | Core |
| 2 | CBS3303 | Interactive Programming | 3 | Core |
| 3 | CBS3205 | Cryptographic Techniques | 2 | Core |
| 4 | CBS3207 | System Security | 2 | Core |
| 5 | CBS3209 | Fault Tolerant Computing | 2 | Core |
| 6 | CSC3251 | Research Methods | 2 | Core |
| 7 | ITC3305 | Database Management Systems | 3 | Core |
| 8 | ITC3303 | Data Communication and Networking | 3 | Core |
|   |   | TOTAL  | 19 |   |
| SECOND SEMESTER COURSES (all courses here must be registered) |
| **S/N**  | **Course Code**  | **Course Title**  | **Credits**  | **Status** |
| 1 | CBS3600 | SIWES  | 6 | Core |
|   |   | TOTAL  | 6 |   |

## FOURTH YEAR- LEVEL IV COURSES

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| FIRST SEMESTER COURSES |
| **S/N**  | **Course Code**  | **Course Title**  | **Credits**  | **Status** |
| 1 | CBS4301 | Cryptography: Algorithms and Applications  | 3 | Core |
| 2 | CBS4303 | Network Security | 3 | Core |
| 3 | CBS4205 | Threats, Exploits and Counter Measures | 2 | Core |
| 4 | CSC4331 | Artificial Intelligence  | 3 | Core |
| 5 | ITC4223 | Ethics and Professional Practices | 2 | Core |
| 6 | EEP3201 | Entrepreneurship and Innovation | 2 | Core |
| 7 | CBS4207 | Enterprise Security and Information Assurance | 2 | Elective |
| 8 | CBS4209 | Information Security Risk Analysis and Management  | 2 | Elective |
| 9 | CBS4211 | Cyber Security in Business and Industry | 2 | Elective |
| 10 | CBS4213 | Security Strategies for Web Application and Social Networks | 2 | Elective |
| 11 | ITC4342 | Software Defined Networks | 3 | Elective |
|   |   | TOTAL | 26 |  |
| SECOND SEMESTER COURSES (all courses here must be registered) |
| **S/N**  | **Course Code**  | **Course Title**  | **Credits**  | **Status** |
| 1 | CBS4202 | Forensic Analysis | 2 | Core |
| 2 | CBS4204 | Special Topics on Information Security | 2 | Core |
| 3 | CBS4306 | Systems Vulnerability Assessment and Testing | 3 | Core |
| 4 | ITC4307 | System Administration and Management | 3 | Core |
| 5 | EEP4201 | Venture Creation and Growth | 2 | Core |
| 6 | CBS4600 | Project | 6 | Core |
| 7 | CBS4308 | Software Security | 3 | Elective |
| 8 | CBS4310 | Database Application Security | 3 | Elective |
| 9 | CBS4212 | Privacy in a Networked World | 2 | Elective |
| 10 | CBS4214 | Information Disaster Recovery  | 2 | Elective |
| 11 | CBS4216 | VoIP and Multimedia Security | 2 | Elective |
| 12 | ITC4344 | Cloud Computing | 3 | Elective |
|   |   | TOTAL | 33 |   |