# KENYA METHODIST UNIVERSITY

## SCHOOL OF COMPUTING AND INFORMATICS

## DEPARTMENT OF INFORMATION TECHNOLOGY

## BACHELOR OF SCIENCE IN CYBERSECURITY AND ETHICAL HACKING

## STUDENT COURSES TRACKING FORM

Registration NO:_____     Names:_____

| SN | UNITCODE | YEAR 1<br>FIRST TRIMESTER | CH | GRADE | REMARK |
|----|----------|--------------------------|----|-------|--------|
| 1 | COMM 111 | Communication Skills | 3 | | |
| 2 | BUSS 114 | Entrepreneurship | 3 | | |
| 3 | THEO 111 | Christian Beliefs | 3 | | |
| 4 | MATH 102 | Foundations of Mathematics | 3 | | |
| 5 | HSCI 225 | HIV/AIDS | 3 | | |
| 6 | BCEH 111 | Introduction to Computer Systems and Security | 3 | | |
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| SN | UNITCODE | YEAR 1<br>SECOND TRIMESTER | CH | GRADE | REMARK |
|----|----------|---------------------------|----|-------|--------|
| 1 | BCEH 121 | Operating Systems Security | 3 | | |
| 2 | BCEH 122 | Database Systems | 3 | | |
| 3 | BCEH 123 | Differential and Integral Calculus | 3 | | |
| 4 | BCEH 124 | Introduction to Programming | 3 | | |
| 5 | BCEH 126 | Introduction to Cybersecurity and Digital Forensics | 3 | | |
| 6 | MATH 132 | Probability and Statistics I | 3 | | |

| SN | UNITCODE | YEAR 1<br>THIRD TRIMESTER | CH | GRADE | REMARK |
|----|----------|---------------------------|----|-------|--------|
| 1 | BCEH 211 | Computer Networks | 3 | | |
| 2 | BCEH 212 | Computer Systems Architecture | 3 | | |
| 3 | BCEH 213 | Physics for Computing Systems and Digital Electronics | 3 | | |
| 4 | BCEH 214 | Human Psychology and Philosophy | 3 | | |
| 5 | MATH 110 | Linear Algebra | 3 | | |
| 6 | ENVI 201 | Environmental Science | 3 | | |

| SN | UNITCODE | YEAR 2<br>FIRST TRIMESTER | CH | GRADE | REMARK |
|----|----------|---------------------------|----|-------|--------|
| 1 | BCEH 221 | Software Engineering | 3 | | |
| 2 | BCEH 222 | Digital Forensics and Investigations | 3 | | |
| 3 | BCEH 223 | Digital Forensics Tools and Technologies | 3 | | |
| 4 | BCEH 224 | Introduction to Machine Learning | 3 | | |
| 5 | BCEH 215 | Internet of Things (IoT) Security | 3 | | |
| 6 | MATH 211 | Discrete Mathematics | 3 | | |
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Registration NO:_____     Names:_____

| SN | UNITCODE | YEAR 2 | CH | GRADE | REMARK |
|---|---|---|---|---|---|
| SN | UNITCODE | SECOND TRIMESTER | CH | GRADE | REMARK |
| 1 | BCEH 312 | Penetration Testing and Ethical Hacking | 3 | | |
| 2 | BCEH 313 | Distributed Systems | 3 | | |
| 3 | BCEH 314 | Intrusion Detection and Prevention Techniques | 3 | | |
| 4 | BCEH 315 | Systems Forensics | 3 | | |
| 5 | BCEH 316 | Research Methods | 3 | | |
| 6 | Elective | Elective-1 | 3 | | |
| | | ELECTIVE (1) | | | |
| 1 | BCEH 317 | Blockchain and Cryptocurrency Security | 3 | | |
| 2 | BCEH 318 | Advanced Penetration Testing | 3 | | |
| 3 | BCEH 319 | Threat Intelligence and Analysis | 3 | | |
| 4 | BCEH 311 | Network Design and Management | 3 | | |
| | | | | | |
| | | YEAR 2 | | | |
| SN | UNITCODE | THIRD TRIMESTER | CH | GRADE | REMARK |
| 1 | BCEH 321 | Cryptography and Steganography | 3 | | |
| 2 | BCEH 322 | Malware Detection and Analysis | 3 | | |
| 3 | MATH 230 | Probability and statistics II | 3 | | |
| 4 | BCEH 326 | Computer Network Security | 3 | | |
| 5 | Elective | Elective 2 | 3 | | |
| 6 | Elective | Elective 3 | 3 | | |
| | | ELECTIVES (2) | | | |
| 1 | BCEH 327 | Social Engineering and Psychological Exploits | 3 | | |
| 2 | BCEH 328 | Reverse Engineering and Malware Analysis | 3 | | |
| 3 | BCEH 329 | Mobile Application Security | 3 | | |
| 4 | BCEH 330 | IoT and Embedded Systems Security | 3 | | |
| 5 | BCEH 325 | Distributed Databases | 3 | | |
| 6 | BCEH 324 | Web Security and Privacy | 3 | | |
| | | | | | |
| | | YEAR 3 | | | |
| SN | UNITCODE | FIRST TRIMESTER | CH | GRADE | REMARK |
| 1 | BCEH 411 | Information Systems Control and Audit | 3 | | |
| 2 | BCEH 413 | Artificial Intelligence | 3 | | |
| 3 | BCEH 416 | Security Analytics and Visualization | 3 | | |
| 4 | BCEH 417 | Incident Response and Recovery | 3 | | |
| 5 | Elective | Elective 4 | 3 | | |

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STUDENT COURSES TRACKING FORM

Registration NO:_____        Names:_____

| 6 | Elective | Elective 5 | 3 | | |
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| SN | UNITCODE | | CH | GRADE | REMARK |
|---|---|---|---|---|---|
| | | ELECTIVES (2) | | | |
| 1 | BCEH 418 | Secure DevOps (DevSecOps) | 3 | | |
| 2 | BCEH 430 | Game Theory in Cybersecurity | 3 | | |
| 3 | BCEH 431 | Ethical Hacking with AI and Machine Learning | 3 | | |
| 4 | BCEH 412 | Secure Software Development | 3 | | |
| 5 | BCEH 414 | Database Management Systems Security | 3 | | |
| 6 | BCEH 415 | Cloud Computing Security | 3 | | |
| | | YEAR 3 | | | |
| SN | UNITCODE | SECOND TRIMESTER | CH | GRADE | REMARK |
| 1 | BCEH 422 | Advanced Information Security Management | 3 | | |
| 3 | BCEH 423 | Emerging Cybersecurity Technologies and Digital Forensics Bootcamps | 3 | | |
| 4 | BCEH 424 | Systems Security Risk Management | 3 | | |
| 5 | BCEH 425 | Simulation and Modelling | 3 | | |
| 2 | BCEH 426 | Cybersecurity Governance Laws, Policy and Ethics | 3 | | |
| 6 | BCEH 427 | Digital Markets Architecture and Security | 3 | | |
| 7 | BCEH 428 | Research Project-Proposal | 3 | | |
| | | | | | |
| | | YEAR 3 | | | |
| SN | UNITCODE | THIRD TRIMESTER | CH | GRADE | REMARK |
| 1 | BCEH 428 | Research Project-Execution | | | |
| 2 | BCEH 429 | Industrial Attachment-External | 3 | | |