

# BACHELOR OF SCIENCE IN CYBERSECURITY (August 2026)

## FRESHMAN YEAR

| FIRST SEMESTER            |                                      |              |               |     |                    | SECOND SEMESTER           |                                         |              |               |     |                          |
|---------------------------|--------------------------------------|--------------|---------------|-----|--------------------|---------------------------|-----------------------------------------|--------------|---------------|-----|--------------------------|
| Course Number             | Course Title                         | Credit Hours | Contact Hours |     | Pre-requisite      | Course Number             | Course Title                            | Credit Hours | Contact Hours |     | Pre-requisite            |
|                           |                                      |              | Lec           | Lab |                    |                           |                                         |              | Lec           | Lab |                          |
| <b>ISLM 1221</b>          | Islamic Cultures, Values & Societies | 2            | 2             | 0   | <i>IELTS/APTIS</i> | <b>UNIV 1221</b>          | Generative AI Prompt Engineering Basics | 2            | 2             | 0   | <i>UNIV 1211</i>         |
| <b>COMM 1321</b>          | Oral Communication                   | 3            | 3             | 0   | <i>IELTS/APTIS</i> | <b>COMM 1322</b>          | Written Communication                   | 3            | 3             | 0   | <i>COMM 1321</i>         |
| <b>MATH 1311</b>          | Finite Math. for Stu. of Busi.       | 3            | 3             | 1   | <i>PRPM 0012</i>   | <b>UNIV 1212</b>          | Critical Thinking and Problem Solving   | 2            | 2             | 0   | <i>UNIV 1211</i>         |
| <b>UNIV 1211</b>          | Prof. Development and Competencies   | 2            | 2             | 0   |                    | <b>MATH 1313</b>          | Statistical Methods                     | 3            | 3             | 1   | <i>PRPM 0012</i>         |
| <b>GEIT 1411</b>          | Computer Science I                   | 4            | 3             | 2   |                    | <b>GEIT 1412</b>          | Computer Science II                     | 4            | 3             | 2   | <i>GEIT 1411</i>         |
| <b>CSEC 1311</b>          | Intro to Cybersecurity               | 3            | 3             | 0   |                    | <b>PHED 1112</b>          | Healthy Behaviors and Management        | 1            | 1             | 0   | <i>PHED 1111</i>         |
| <b>PHED 1111</b>          | Active Living Lifestyle              | 1            | 1             | 0   |                    |                           | Social Science Elective I*              | 3            |               |     | <i>See from the list</i> |
| <b>Total Credit Hours</b> |                                      | <b>18</b>    |               |     |                    | <b>Total Credit Hours</b> |                                         | <b>18</b>    |               |     |                          |

## SOPHOMORE YEAR

| FIRST SEMESTER            |                                        |              |               |     |                           | SECOND SEMESTER           |                                               |              |               |     |                          |
|---------------------------|----------------------------------------|--------------|---------------|-----|---------------------------|---------------------------|-----------------------------------------------|--------------|---------------|-----|--------------------------|
| Course Number             | Course Title                           | Credit Hours | Contact Hours |     | Pre-requisite             | Course Number             | Course Title                                  | Credit Hours | Contact Hours |     | Pre-requisite            |
|                           |                                        |              | Lec           | Lab |                           |                           |                                               |              | Lec           | Lab |                          |
| <b>UNIV 2221</b>          | Future Skills                          | 2            | 2             | 0   | <i>UNIV 1221</i>          | <b>UNIV 2222</b>          | Systems Thinking for Future Innovations       | 2            | 2             | 0   | <i>UNIV 2221</i>         |
| <b>UNIV 1213</b>          | Leadership and Teamwork                | 2            | 2             | 0   | <i>UNIV 1212</i>          | <b>COMM 2322</b>          | Writing & Research                            | 3            | 3             | 0   | <i>COMM 2321</i>         |
| <b>ASSE 2111</b>          | Learning Outcome Assessment I          | 1            | 1             | 1   | <i>Sophomore Standing</i> | <b>GEIT 2331</b>          | Mathematical Reasoning & Algorithmic Thinking | 3            | 3             | 0   | <i>GEIT 1412</i>         |
| <b>GEIT 2421</b>          | Data Structures                        | 4            | 3             | 2   | <i>GEIT 1412</i>          | <b>CSEC 2331</b>          | Digital Forensics                             | 3            | 3             | 0   | <i>GEIT 2291</i>         |
| <b>CSEC 2431</b>          | Network Management                     | 4            | 3             | 3   | <i>GEIT 1412</i>          | <b>GEIT 3331</b>          | Computer Organization                         | 3            | 3             | 0   | <i>GEIT 1412</i>         |
| <b>GEIT 2291</b>          | Professional Ethics                    | 2            | 2             | 0   |                           |                           | Social Science Elective II*                   | 3            |               |     | <i>See from the list</i> |
| <b>COMM 2321</b>          | Technical & Professional Communication | 3            | 3             | 0   | <i>COMM 1322</i>          |                           |                                               |              |               |     |                          |
| <b>Total Credit Hours</b> |                                        | <b>18</b>    |               |     |                           | <b>Total Credit Hours</b> |                                               | <b>17</b>    |               |     |                          |

## JUNIOR YEAR

| FIRST SEMESTER            |                                    |              |               |     |                                        | SECOND SEMESTER           |                              |              |               |     |                          |
|---------------------------|------------------------------------|--------------|---------------|-----|----------------------------------------|---------------------------|------------------------------|--------------|---------------|-----|--------------------------|
| Course Number             | Course Title                       | Credit Hours | Contact Hours |     | Pre-requisite                          | Course Number             | Course Title                 | Credit Hours | Contact Hours |     | Pre-requisite            |
|                           |                                    |              | Lec           | Lab |                                        |                           |                              |              | Lec           | Lab |                          |
| <b>ASSE 3211</b>          | Learning Outcome Assessment II     | 2            | 2             | 1   | <i>ASSE 2111 &amp; Junior Standing</i> | <b>CSEC 3352</b>          | Secure Software Engineering  | 3            | 3             | 0   | <i>GEIT 3351</i>         |
| <b>GEIT 3341</b>          | Database I                         | 3            | 2             | 2   | <i>GEIT 1412</i>                       | <b>CSEC 3432</b>          | Cyber Operations             | 4            | 3             | 2   | <i>CSEC 2431</i>         |
| <b>CSEC 3431</b>          | Network Security                   | 4            | 3             | 3   | <i>CSEC 2431</i>                       | <b>CSEC 3354</b>          | Intro. to Cryptography       | 3            | 3             | 0   | <i>GEIT 2421</i>         |
| <b>GEIT 3351</b>          | Principles of Software Engineering | 3            | 3             | 0   | <i>GEIT 1412</i>                       | <b>CSEC 3355</b>          | Scripting Languages          | 3            | 3             | 0   | <i>GEIT 1412</i>         |
|                           | CSEC Elective I***                 | 3            |               |     | <i>See from the list</i>               |                           | Natural Science Elective I** | 4            |               |     | <i>See from the list</i> |
| <b>Total Credit Hours</b> |                                    | <b>15</b>    |               |     |                                        | <b>Total Credit Hours</b> |                              | <b>17</b>    |               |     |                          |

| SUMMER OF JUNIOR YEAR |              |              |                               |                                                                       |
|-----------------------|--------------|--------------|-------------------------------|-----------------------------------------------------------------------|
| Course Number         | Course Title | Credit Hours |                               | Pre-requisite                                                         |
| <b>GEIT 4361</b>      | Internship   | 3            | 8 weeks (320 hours) full time | End of Junior Year (summer before graduation) and department approval |

| SENIOR YEAR               |                                        |              |               |     |                                        |                           |                                       |              |               |     |                          |
|---------------------------|----------------------------------------|--------------|---------------|-----|----------------------------------------|---------------------------|---------------------------------------|--------------|---------------|-----|--------------------------|
| FIRST SEMESTER            |                                        |              |               |     |                                        | SECOND SEMESTER           |                                       |              |               |     |                          |
| Course Number             | Course Title                           | Credit Hours | Contact Hours |     | Pre-requisite                          | Course Number             | Course Title                          | Credit Hours | Contact Hours |     | Pre-requisite            |
|                           |                                        |              | Lec           | Lab |                                        |                           |                                       |              | Lec           | Lab |                          |
| <b>CSEC 4361</b>          | Operating Systems                      | 3            | 3             | 0   | <i>GEIT 3331</i>                       | <b>CSEC 4471</b>          | Vulnerability and Penetration testing | 4            | 3             | 2   | <i>CSEC 3355</i>         |
| <b>CSEC 4362</b>          | Machine Learning                       | 3            | 3             | 0   | <i>GEIT 2421</i>                       | <b>CSEC 4472</b>          | Systems Security                      | 4            | 3             | 2   | <i>CSEC 4361</i>         |
| <b>ASSE 4311</b>          | Learning Outcome Assessment III - CSEC | 3            | 3             | 0   | <i>ASSE 3211 &amp; Senior Standing</i> |                           | CSEC Elective III***                  | 3            |               |     | <i>See from the list</i> |
|                           | CSEC Elective II***                    | 3            |               |     | <i>See from the list</i>               |                           | Natural Science Elective II**         | 4            |               |     | <i>See from the list</i> |
| <b>Total Credit Hours</b> |                                        | <b>12</b>    |               |     |                                        | <b>Total Credit Hours</b> |                                       | <b>15</b>    |               |     |                          |

|                                                              |
|--------------------------------------------------------------|
| <b>CYBERSECURITY PROGRAM TOTAL DEGREE CREDIT HOURS = 133</b> |
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| * Social Science Electives: 2 Courses = 6 Credit Hours |                                                   |              |                |
|--------------------------------------------------------|---------------------------------------------------|--------------|----------------|
| Course Number                                          | Course Title                                      | Credit Hours | Pre-Requisites |
| <b>FREN 1311</b>                                       | Introduction to French Language                   | 3            |                |
| <b>FURS 1311</b>                                       | Introduction to Futures Skills                    | 3            |                |
| <b>FUTR 1311</b>                                       | Introduction to Futures Studies                   | 3            |                |
| <b>GEGR 1311</b>                                       | World Regional Geography                          | 3            |                |
| <b>HIST 1311</b>                                       | World Civilizations                               | 3            |                |
| <b>PSYC 1311</b>                                       | Introduction to Psychology                        | 3            |                |
| <b>SERV 1311</b>                                       | Introduction to Service Learning and Volunteering | 3            |                |
| <b>SPAN 1311</b>                                       | Introduction to Spanish Language                  | 3            |                |
| <b>SUST 1311</b>                                       | Introduction to Sustainability                    | 3            |                |
| <b>SYST 1311</b>                                       | Introduction to Systems Thinking                  | 3            |                |
| <b>BSTW 1311</b>                                       | Behavioral Sciences in 3D World                   | 3            |                |
| <b>DANT 1311</b>                                       | Digital Anthropology                              | 3            |                |
| <b>ECON 1311</b>                                       | Introduction to Macroeconomics                    | 3            |                |
| <b>ECON 1312</b>                                       | Introduction to Microeconomics                    | 3            |                |

| <b>** Natural Science Electives: 2 Course = 8 Credit Hours</b> |                        |                     |                      |     |                      |
|----------------------------------------------------------------|------------------------|---------------------|----------------------|-----|----------------------|
| <b>Course Number</b>                                           | <b>Course Title</b>    | <b>Credit Hours</b> | <b>Contact Hours</b> |     | <b>Pre-requisite</b> |
|                                                                |                        |                     | LEC                  | LAB |                      |
| <b>BIOL 1411</b>                                               | Introductory Biology   | 4                   | 3                    | 3   | PRPM 0011            |
| <b>CHEM 1411</b>                                               | Introductory Chemistry | 4                   | 3                    | 3   | PRPM 0011            |
| <b>PHYS 1411</b>                                               | Introductory Physics   | 4                   | 3                    | 3   | PRPM 0011            |

| <b>*** CSEC Electives: 3 Courses = 9 Credit Hours</b> |                                                         |                     |                      |     |                                       |
|-------------------------------------------------------|---------------------------------------------------------|---------------------|----------------------|-----|---------------------------------------|
| <b>Course Number</b>                                  | <b>Course Title</b>                                     | <b>Credit Hours</b> | <b>Contact Hours</b> |     | <b>Pre-requisite</b>                  |
|                                                       |                                                         |                     | LEC                  | LAB |                                       |
| <b>CSEC 4377</b>                                      | Network Administration                                  | 3                   | 3                    | 0   | CSEC 4361<br>CSEC 2431                |
| <b>CSEC 4363</b>                                      | Web Application Penetration Testing                     | 3                   | 3                    | 0   | CSEC 3355                             |
| <b>CSEC 4364</b>                                      | ICS/SCADA Security Essentials                           | 3                   | 3                    | 0   | CSEC 3355                             |
| <b>CSEC 4365</b>                                      | Critical Security Controls: Implementation and Auditing | 3                   | 3                    | 0   | CSEC 3355                             |
| <b>CSEC 4376</b>                                      | Secure E-Commerce                                       | 3                   | 3                    | 0   | GEIT 3331                             |
| <b>ITAP 4315</b>                                      | Cloud Computing                                         | 3                   | 3                    | 0   | GEIT 3331<br>CSEC 2431                |
| <b>ITAP 4390</b>                                      | Information Security and Assurance                      | 3                   | 3                    | 0   | CSEC 4361<br>CSEC 3431                |
| <b>ITAP 4363</b>                                      | Systems Administration                                  | 3                   | 3                    | 0   | CSEC 4361<br>CSEC 2431                |
| <b>ITAP 4367</b>                                      | Database Administration                                 | 3                   | 3                    | 0   | CSEC 4361<br>GEIT 3341                |
| <b>CSEC 4393</b>                                      | Special Topics – I                                      | 3                   | 3                    | 0   | Senior Standing & Department Approval |
| <b>CSEC 4398</b>                                      | Special Topics – II                                     | 3                   | 3                    | 0   | Senior Standing & Department Approval |
| <b>CSEC 4399</b>                                      | Special Topics – III                                    | 3                   | 3                    | 0   | Senior Standing & Department Approval |