

Tilak Maharashtra Vidyapeeth  
Department of Computer Science  
BCA (Cyber Security) course structure 2025-26

| <b>B. C. A. (Specialization in Cyber Security) (464)</b> |                                            |                   |               |           |                     |            |                        |            |                    |
|----------------------------------------------------------|--------------------------------------------|-------------------|---------------|-----------|---------------------|------------|------------------------|------------|--------------------|
| <b>Subject Code</b>                                      | <b>Subject Name</b>                        | <b>Category</b>   | <b>Credit</b> |           | <b>Theory Marks</b> |            | <b>Practical Marks</b> |            | <b>Total Marks</b> |
|                                                          |                                            |                   | <b>Th</b>     | <b>Pr</b> | <b>EXT</b>          | <b>INT</b> | <b>EXT</b>             | <b>INT</b> |                    |
| BCAC25-101                                               | C Programming                              | Core              | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-102                                               | Mathematics                                | Core              | 4             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-103                                               | Computer & Network Fundamentals            | Interdisciplinary | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-104                                               | Operating System                           | DSC               | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-105                                               | English                                    | AECC              | 2             | -         | 30                  | 20         | -                      | -          | 50                 |
| BCAC25-106                                               | OR<br>Sanskrit                             |                   |               |           |                     |            |                        |            |                    |
| VAC105                                                   | Nitishataka Purvardha (Marathi)            | Open Elective     | 2             | -         | -                   | 50         | -                      | -          | 50                 |
| VAC109                                                   | OR<br>Gender Perspectives                  |                   |               |           |                     |            |                        |            |                    |
| BCAC25-107                                               | Logic Development                          | DSC               | 2             | -         | -                   | 50         | -                      | -          | 50                 |
| BCAC25-108                                               | C Programming (PR)                         | Core-LAB          | -             | 1         | -                   | -          | 30                     | 20         | 50                 |
|                                                          |                                            |                   | <b>20</b>     |           |                     |            |                        |            | <b>600</b>         |
| BCAC25-201                                               | Object Oriented Programming using C++      | Core              | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-202                                               | Statistics                                 | Core              | 4             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-203                                               | Structured System Analysis and Design      | DSC               | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-204                                               | Basics of Ethical Hacking                  | Core              | 3             | -         | 60                  | 40         | -                      | -          | 100                |
| BCAC25-205                                               | Communication Skills                       | AECC              | 2             | -         | 30                  | 20         | -                      | -          | 50                 |
| BCAC25-206                                               | Yoga                                       | Open Elective     | -             | 2         | 30                  | 20         |                        |            | 50                 |
| OR                                                       | OR                                         |                   |               |           |                     |            |                        |            |                    |
| VAC207                                                   | Nitishataka Uttarardha (Marathi)           |                   | 2             | -         | -                   | 50         | -                      | -          |                    |
| OR                                                       | OR                                         |                   |               |           |                     |            |                        |            |                    |
| VAC211                                                   | Moral Values                               |                   | 2             | -         | -                   | 50         |                        |            |                    |
| IKS24                                                    | Indian Knowledge System (IKS)              | IKS               | 2             | -         | -                   | 50         | -                      | -          | 50                 |
| BCAC25-207                                               | Object Oriented Programming using C++ (PR) | Core-Lab          | -             | 1         | -                   | -          | 30                     | 20         | 50                 |
|                                                          |                                            |                   | <b>20</b>     |           |                     |            |                        |            | <b>600</b>         |

Tilak Maharashtra Vidyapeeth  
Department of Computer Science  
BCA (Cyber Security) course structure 2025-26

| Subject Code | Subject Name                                        | Category                 | Credit<br>Th Pr | Theory Marks<br>EXT INT | Practical Marks<br>EXT INT | Total<br>Marks |        |
|--------------|-----------------------------------------------------|--------------------------|-----------------|-------------------------|----------------------------|----------------|--------|
| BCAC25-301   | Advanced Web Designing                              | Core                     | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-302   | Database Management System (DBMS)                   | Core                     | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-303   | Environmental Studies                               | Value Added Course       | 4               | -                       | - 100                      | - - 100        |        |
| BCAC25-304   | Application and Network Attacks                     | Core                     | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-305   | Marathi                                             | AECC                     | 2               | -                       | 30 20                      | - - 50         |        |
| BCAC25-306   | OR<br>Japanese                                      |                          |                 |                         |                            |                |        |
| SEC301       | Advanced Excel                                      | Skill Enhancement Course | 2               | -                       | - 50                       | - - 50         |        |
| BCAC25-307   | Cyber Security Analysis and Countermeasures         | DSC                      | 2               | -                       | - 50                       | - - 50         |        |
| BCAC25-308   | Advanced Web Designing (PR)                         | Core-Lab                 | -               | 1                       | - - 30 20                  | 50             |        |
|              |                                                     |                          | 20              |                         | 600                        |                |        |
| BCAC25-401   | Advanced Database Management System                 | Core                     | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-402   | Java Programming                                    | Core                     | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-403   | Vulnerabilities Analysis & Penetration Testing      | DSC                      | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-404   | Unified Modeling Language(UML)                      | DSC                      | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-405   | Soft Skills                                         | Open Elective            | 1               | 1                       | -                          | 50             | - - 50 |
| OR<br>VAC403 | OR<br>Personality Development                       |                          | 2               | -                       | -                          |                |        |
| BCAC25-406   | IT Act & DPDP Act                                   | DSC                      | 3               | -                       | 60 40                      | - - 100        |        |
| BCAC25-407   | Vulnerabilities Analysis & Penetration Testing (PR) | DSC-LAB                  | -               | 1                       | - - 30 20                  | 50             |        |
| BCAC25-408   | Java Programming (PR)                               | Core-LAB                 | -               | 1                       | - - 30 20                  | 50             |        |
| BCAC25-409   | Advanced Database Management System (PR)            | Core-LAB                 | -               | 1                       | - - 30 20                  | 50             |        |
|              |                                                     |                          | 20              |                         | 700                        |                |        |

Tilak Maharashtra Vidyapeeth  
Department of Computer Science  
BCA (Cyber Security) course structure 2025-26

| Subject Code | Subject Name                        | Category          | Credit<br>Th Pr | Theory Marks<br>EXT INT | Practical Marks<br>EXT INT | Total<br>Marks |
|--------------|-------------------------------------|-------------------|-----------------|-------------------------|----------------------------|----------------|
| BCAC25-501   | Python Programming                  | Core              | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-502   | Data acquisition and forensics      | Core              | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-503   | C# Basics                           | DSC               | 2 -             | - 50                    | - -                        | 50             |
| BCAC25-504   | E-Commerce                          | Interdisciplinary | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-505   | Cyber Crime Investigation           | Core              | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-506   | Future Trends in Cyber Security     | DSC               | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-507   | Python Programming (PR)             | Core-LAB          | - 1             | - -                     | 30 20                      | 50             |
| BCAC25-508   | Cyber Crime Investigation (PR)      | Core-LAB          | - 1             | - -                     | 30 20                      | 50             |
| BCAC25-509   | Data acquisition and forensics (PR) | Core-LAB          | - 1             | - -                     | 30 20                      | 50             |
|              |                                     |                   | <b>20</b>       |                         |                            | <b>700</b>     |
| BCAC25-601   | Mobile Audit & Forensics            | Core              | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-602   | Blockchain Technology               | DSC               | 2 -             | 30 20                   | - -                        | 50             |
| BCAC25-603   | Cloud Technology & Security         | Core              | 3 -             | 60 40                   | - -                        | 100            |
| BCAC25-604   | Project                             | Core              | - 4             | - -                     | 60 40                      | 100            |
| BCAC25-605   | Mooc - I                            | Mooc              | 2 -             | - 50                    | - -                        | 50             |
| BCAC25-606   | Internship                          | Internship        | - 4             | - -                     | - 100                      | 100            |
| BCAC25-607   | Cloud Technology & Security (PR)    | Core-LAB          | - 1             | - -                     | 30 20                      | 50             |
| BCAC25-608   | Mobile Audit & Forensics (PR)       | Core-LAB          | - 1             | - -                     | 30 20                      | 50             |
|              |                                     |                   | <b>20</b>       |                         |                            | <b>600</b>     |

Tilak Maharashtra Vidyapeeth  
Department of Computer Science  
BCA (Cyber Security) course structure 2025-26

| Subject Code | Subject Name                          | Category   | Credit<br>Th Pr |   | Theory Marks<br>EXT INT |    | Practical Marks<br>EXT INT |     | Total<br>Marks |
|--------------|---------------------------------------|------------|-----------------|---|-------------------------|----|----------------------------|-----|----------------|
| BCA25-701    | Data Structure using python           | Core       | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-702    | Green Computing                       | DSC        | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-703    | Discrete Mathematics                  | Core       | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-704    | Advanced Linux & Server Security      | DSC        | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-705    | Infrastructure Audit and Security     | DSC        | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-706    | Research Methodology                  | AECC       | 4               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-707    | MOOC - II                             | MOOC       | -               | 1 | -                       | 50 | -                          | -   | 50             |
| BCA25-708    | Data Structure using python (PR)      | Core-LAB   | -               | 1 | -                       | -  | 30                         | 20  | 50             |
| BCA25-709    | Advanced Linux & Server Security (PR) | DSC-LAB    | -               | 1 | -                       | -  | 30                         | 20  | 50             |
|              |                                       |            | 22              |   |                         |    |                            |     | 750            |
| BCA25-801    | Social Media Analytics & Security     | Core       | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-802    | Advanced Computer Network             | DSC        | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-803    | Django Web Framework                  | DSC        | 3               | - | 60                      | 40 | -                          | -   | 100            |
| BCA25-804    | Project (Red Team Audit)              | Core       | -               | 6 | -                       | -  | -                          | 200 | 200            |
| BCA25-805    | Internship                            | Internship | -               | 4 | -                       | -  | -                          | 100 | 100            |
| BCA25-806    | MOOC - III                            | MOOC       | 2               | - | -                       | -  | -                          | 100 | 100            |
| BCA25-807    | Django Web Framework (PR)             | DSC-LAB    | -               | 1 | -                       | -  | 30                         | 20  | 50             |
|              |                                       |            | 22              |   |                         |    |                            |     | 750            |