



**BCA Computer Applications (Full Time)**  
**Curriculum & Syllabus**  
**2022 Regulations**

| <b>I SEMESTER</b> |                                       |                                          |           |          |              |            |                     |
|-------------------|---------------------------------------|------------------------------------------|-----------|----------|--------------|------------|---------------------|
| <b>S.NO</b>       | <b>SUB.CODE</b>                       | <b>TITLE OF THE SUBJECT</b>              | <b>C</b>  | <b>L</b> | <b>T/SLR</b> | <b>P/R</b> | <b>Ty/Lb/ETP/IE</b> |
| 1                 | HBTA22001/<br>HBHI22001/<br>HBFR22001 | Language : Tamil-I / Hindi-I / French –I | 3         | 3        | 0/0          | 0/0        | Ty                  |
| 2                 | HBEN22001                             | Language: English – I                    | 3         | 3        | 0/0          | 0/0        | Ty                  |
| 3                 | HBMA22ID1                             | Allied -1 : Mathematics I                | 4         | 3        | 1/0          | 0/0        | Ty                  |
| 4                 | CBCA22001                             | Programming In C                         | 3         | 2        | 1/0          | 0/0        | Ty                  |
| 5                 | HBCC22001                             | Environmental Studies                    | 3         | 3        | 0/0          | 0/0        | Ty                  |
| <b>PRACTICAL</b>  |                                       |                                          |           |          |              |            |                     |
| 6                 | HBCC22L01                             | Computer Software Lab                    | 2         | 0        | 0/0          | 4/0        | Lb                  |
| 7                 | CBCA22L01                             | Programming in C Laboratory              | 2         | 0        | 0/0          | 4/0        | Lb                  |
| 8                 | HBCC22I02                             | Soft Skill – I                           | 1         | 0        | 0/0          | 2/0        | IE                  |
| <b>TOTAL</b>      |                                       |                                          | <b>21</b> |          |              |            |                     |

| <b>II SEMESTER</b> |                                       |                                                                              |           |          |              |            |                     |
|--------------------|---------------------------------------|------------------------------------------------------------------------------|-----------|----------|--------------|------------|---------------------|
| <b>S.NO</b>        | <b>SUB.CODE</b>                       | <b>TITLE OF THE SUBJECT</b>                                                  | <b>C</b>  | <b>L</b> | <b>T/SLR</b> | <b>P/R</b> | <b>Ty/Lb/ETP/IE</b> |
| 1.                 | HBTA22002/<br>HBHI22002/<br>HBFR22002 | Language : Tamil-II/ Hindi-II / French –II                                   | 3         | 3        | 0/0          | 0/0        | Ty                  |
| 2.                 | HBEN22002                             | Language : English – II                                                      | 3         | 3        | 0/0          | 0/0        | Ty                  |
| 3.                 | HBMA22ID2                             | Allied –II : Mathematics II                                                  | 4         | 3        | 1/0          | 0/0        | Ty                  |
| 4                  | <b>CBCA23001</b>                      | Object Oriented Paradigm and Programming in C++                              | 3         | 2        | 1/0          | 0/0        | Ty                  |
| 5.                 | CBCA22003                             | Multimedia And Animation                                                     | 4         | 3        | 1/0          | 0/0        | Ty                  |
| <b>PRACTICAL</b>   |                                       |                                                                              |           |          |              |            |                     |
| 6.                 | CBCA22L02                             | Programming in C++ Laboratory                                                | 2         | 0        | 0/0          | 4/0        | Lb                  |
| 7.                 | CBCA22IL1                             | Allied – 1 Lab: Multimedia and Animation Lab Using Mathematical Applications | 2         | 0        | 0/0          | 4/0        | Lb                  |
| 8.                 | HBCC22I03                             | Soft Skill – II                                                              | 1         | 0        | 0/0          | 2/0        | IE                  |
| <b>TOTAL</b>       |                                       |                                                                              | <b>22</b> |          |              |            |                     |



| III SEMESTER     |                  |                                                 |           |          |       |     |              |
|------------------|------------------|-------------------------------------------------|-----------|----------|-------|-----|--------------|
| S.NO             | SUB.CODE         | TITLE OF THE SUBJECT                            | C         | L        | T/SLR | P/R | Ty/Lb/ETP/IE |
| 1.               | MBFP22ID1        | Allied - III :Financial Accounting              | 3         | 2        | 1/0   | 0/0 | Ty           |
| 2.               | CBCA22004        | Programming in Java                             | 4         | 3        | 1/0   | 0/0 | Ty           |
| 3.               | CBCA22005        | Computer Networks                               | 4         | 4        | 0/0   | 0/0 | Ty           |
| 4.               | CBCA22006        | Data Structures                                 | 3         | 2        | 1/0   | 0/0 | Ty           |
| 5.               | CBCA22007        | Software Engineering                            | 3         | 2        | 1/0   | 0/0 | Ty           |
| <b>PRACTICAL</b> |                  |                                                 |           |          |       |     |              |
| 6.               | CBCA22L03        | Programming In Java Laboratory                  | 2         | 0        | 0/0   | 4/0 | Lb           |
| 7.               | <b>CBCA22L07</b> | <b>Data Structures and Algorithm Laboratory</b> | <b>2</b>  | <b>0</b> | 0/0   | 4/0 | Lb           |
| <b>TOTAL</b>     |                  |                                                 | <b>21</b> |          |       |     |              |

| IV SEMESTER      |                  |                                      |           |          |       |     |              |
|------------------|------------------|--------------------------------------|-----------|----------|-------|-----|--------------|
| S.NO             | SUB.CODE         | TITLE OF THE SUBJECT                 | C         | L        | T/SLR | P/R | Ty/Lb/ETP/IE |
| 1.               | CBCA22ID1        | Allied - IV: Digital Fundamentals    | 3         | 2        | 1/0   | 0/0 | Ty           |
| 2.               | CBCA22008        | Visual Programming                   | 4         | 3        | 1/0   | 0/0 | Ty           |
| 3.               | CBCA22009        | Database Management                  | 4         | 3        | 1/0   | 0/0 | Ty           |
| 4.               | <b>CBCA22016</b> | <b>Distributed Computing</b>         | <b>3</b>  | <b>3</b> | 0/0   | 0/0 | Ty           |
| 5.               | CBCA22EXX        | Program Elective –I                  | 3         | 3        | 0/0   | 0/0 | Ty           |
| <b>PRACTICAL</b> |                  |                                      |           |          |       |     |              |
| 6.               | <b>CBCA22L08</b> | <b>Visual Programming Laboratory</b> | <b>2</b>  | <b>0</b> | 0/0   | 4/0 | Lb           |
| 7.               | CBCA22L04        | Database Management Laboratory       | 2         | 0        | 0/0   | 4/0 | Lb           |
| 8.               | HBFL22IXX        | Foreign Language                     | 1         | 0        | 0/0   | 2/0 | IE           |
| <b>TOTAL</b>     |                  |                                      | <b>22</b> |          |       |     |              |



| V SEMESTER       |                  |                                   |           |          |            |            |              |
|------------------|------------------|-----------------------------------|-----------|----------|------------|------------|--------------|
| S.NO             | SUB.CODE         | TITLE OF THE SUBJECT              | C         | L        | T/SLR      | P/R        | Ty/Lb/ETP/IE |
| 1                | CBCA22010        | Programming in Python             | 4         | 3        | 1/0        | 0/0        | Ty           |
| 2                | CBCA22EXX        | Program Elective –II              | 3         | 3        | 0/0        | 0/0        | Ty           |
| 3                | CBCA22011        | Operating Systems                 | 3         | 3        | 0/0        | 0/0        | Ty           |
| 4                | <b>CBCA22017</b> | <b>Web Programming</b>            | <b>4</b>  | <b>3</b> | <b>1/0</b> | 0/0        | Ty           |
| 5                | HBCC22002        | Entrepreneurship Development      | 3         | 3        | 0/0        | 0/0        | Ty           |
| <b>PRACTICAL</b> |                  |                                   |           |          |            |            |              |
| 6                | CBCA22L05        | Programming in Python Laboratory  | 2         | 0        | 0/0        | 4/0        | Lb           |
| 7                | <b>CBCA22L09</b> | <b>Web Programming Laboratory</b> | <b>2</b>  | <b>0</b> | <b>0/0</b> | <b>4/0</b> | <b>IE</b>    |
| 8                | CBCA22I01        | Core Skill –I                     | 1         | 0        | 0/0        | 2/0        | IE           |
| <b>TOTAL</b>     |                  |                                   | <b>22</b> |          |            |            |              |

| VI SEMESTER      |           |                                     |           |   |       |      |              |
|------------------|-----------|-------------------------------------|-----------|---|-------|------|--------------|
| S.NO             | SUB.CODE  | TITLE OF THE SUBJECT                | C         | L | T/SLR | P/R  | Ty/Lb/ETP/IE |
| 1                | CBCA22EXX | Program Elective –III               | 3         | 3 | 0/0   | 0/0  | Ty           |
| 2                | CBCA22012 | Object Oriented Modeling and Design | 4         | 3 | 1/0   | 0/0  | Ty           |
| 3                | CBCA22EXX | Program Elective –IV                | 3         | 3 | 0/0   | 0/0  | Ty           |
| 4                | HBCC22ET1 | Universal Human Values              | 3         | 2 | 0/0   | 2/0  | ETP          |
| <b>PRACTICAL</b> |           |                                     |           |   |       |      |              |
| 4                | CBCA22L06 | Project Work                        | 9         | 0 | 0/0   | 18/0 | Lb           |
| <b>TOTAL</b>     |           |                                     | <b>22</b> |   |       |      |              |

**SUMMARY OF CREDITS :**

| SEMESTER                 | CREDIT     |
|--------------------------|------------|
| 1 <sup>st</sup> Semester | 21         |
| 2 <sup>nd</sup> Semester | 22         |
| 3 <sup>rd</sup> Semester | 21         |
| 4 <sup>th</sup> Semester | 22         |
| 5 <sup>th</sup> Semester | 22         |
| 6 <sup>th</sup> Semester | 22         |
| <b>TOTAL</b>             | <b>130</b> |



### **ELECTIVE LIST**

| <b>PROGRAM ELECTIVE-I</b> |                 |                               |          |          |              |            |                     |
|---------------------------|-----------------|-------------------------------|----------|----------|--------------|------------|---------------------|
| <b>S.NO</b>               | <b>Sub.Code</b> | <b>Title of the Subject</b>   | <b>C</b> | <b>L</b> | <b>T/SLR</b> | <b>P/R</b> | <b>Ty/Lb/ETP/IE</b> |
| 1.                        | CBCA22E01       | Data Mining and Ware Housing  | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 2.                        | CBCA22E02       | Information Security          | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 3.                        | CBCA22E03       | Professional Ethics           | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 4.                        | CBCA22E04       | Software Project Management   | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 5.                        | CBCA22E05       | Management Information System | 3        | 3        | 0/0          | 0/0        | Ty                  |

| <b>PROGRAM ELECTIVE-II</b> |                 |                             |          |          |              |            |                     |
|----------------------------|-----------------|-----------------------------|----------|----------|--------------|------------|---------------------|
| <b>S.NO</b>                | <b>Sub.Code</b> | <b>Title of the Subject</b> | <b>C</b> | <b>L</b> | <b>T/SLR</b> | <b>P/R</b> | <b>Ty/Lb/ETP/IE</b> |
| 6.                         | CBCA22E06       | Mobile Computing            | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 7.                         | CBCA22E07       | Image Processing            | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 8.                         | CBCA22E08       | Cloud Computing             | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 9.                         | CBCA22E09       | Open Source Programming     | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 10.                        | CBCA22E10       | Software Testing            | 3        | 3        | 0/0          | 0/0        | Ty                  |

| <b>PROGRAM ELECTIVE-III</b> |                 |                             |          |          |              |            |                     |
|-----------------------------|-----------------|-----------------------------|----------|----------|--------------|------------|---------------------|
| <b>S.NO</b>                 | <b>Sub.Code</b> | <b>Title of the Subject</b> | <b>C</b> | <b>L</b> | <b>T/SLR</b> | <b>P/R</b> | <b>Ty/Lb/ETP/IE</b> |
| 6.                          | CBCA22E11       | Artificial Intelligence     | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 7.                          | CBCA22E12       | Design Thinking             | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 8.                          | CBCA22E13       | Block Chain Technology      | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 9.                          | CBCA22E14       | Internet of Things          | 3        | 3        | 0/0          | 0/0        | Ty                  |
| 10.                         | CBCA22E15       | Data Analytics              | 3        | 3        | 0/0          | 0/0        | Ty                  |