## Indrashil University School of Engineering Department of Computer Science & Engineering Bachelor of Computer Application (BCA) (Effective from 2023-2024)

| Semester-1  | Minimum Semester Credit Required : 18    |        |         |
|-------------|--|--------|---------|
|             | Cumulative Semester Credit Required : 18 |        |         |
| Course code | Subject Name                             | L-T- P | Credits |
| BCA-101     | Communicative English                    | 3-0-0  | 3       |
| BCA-102     | Programming in C                         | 3-0-2  | 4       |
| BCA-103     | Basic of web designing                   | 3-0-2  | 4       |
| BCA-104     | Office Automation                        | 3-0-2  | 4       |
|             | Generic Elective Course-1                |        |         |
| BCA-105 A   | Computer Fundamentals                    | 3-0-0  |         |
|             | Or                                       |        | 3       |
| BCA-105 B   | Computer Hardware and Troubleshooting    | 3-0-0  |         |
| Total       |  |        | 18      |

| Semester-2  | Minimum Semester Credit Required: 19     |        |         |
|-------------|--|--------|---------|
|             | Cumulative Semester Credit Required : 37 |        |         |
| Course code | Subject Name                             | L-T- P | Credits |
| BCA-201     | Foundation of Mathematics                | 3-1-0  | 4       |
| BCA-202     | Data Structure                           | 3-0-2  | 4       |
| BCA-203     | Database Management system               | 3-0-2  | 4       |
| BCA-204     | Object Oriented programming using C++    | 3-0-2  | 4       |
|             | Generic Elective Course-2                |        |         |
| BCA-205 A   | E-Commerce                               | 3-0-0  |         |
|             | Or                                       |        | 3       |
| BCA-205 B   | Digital Marketing                        | 3-0-0  |         |
| Total       |  |        | 19      |

| Semester-3  | Minimum Semester Credit Required: 20    |        |         |
|-------------|---|--------|---------|
|             | Cumulative Semester Credit Required: 57 |        |         |
| Course code | Subject Name                            | L-T- P | Credits |
| BCA-301     | Operating system                        | 3-0-2  | 4       |
| BCA-302     | Core Java                               | 3-0-2  | 4       |
| BCA-303     | Software Engineering                    | 3-0-2  | 4       |
| BCA-304     | Computer organization & architecture    | 3-0-0  | 3       |
|             | Discipline Specific Elective Course-1   |        |         |
| BCA-305 A   | Programming using ASP.Net               | 3-1-2  |         |
|             | Or                                      |        | 5       |
| BCA-305 B   | PHP-Programming                         | 3-1-2  |         |
| Total       |   |        | 20      |

| Semester-4  | Minimum Semester Credit Required: 18            |        |         |
|-------------|---|--------|---------|
|             | Cumulative Semester Credit Required: 75         |        |         |
| Course code | Subject Name                                    | L-T- P | Credits |
| BCA-401     | Computer Network                                | 3-0-2  | 4       |
| BCA-402     | Python  | 3-0-2  | 4       |
| BCA-403     | Cyber Security                                  | 3-0-2  | 4       |
| BCA-404     | Fundamental of AI & ML                          | 3-0-0  | 3       |
|             | Discipline Specific Elective Course-2           |        |         |
| BCA-405 A   | Information Security- Cryptography              |        |         |
|             | Or  | 3-0-0  | 3       |
| BCA-405 B   | Cloud Computing                                 |        |         |
| Total       |   | 18     |         |
| Semester-5  | Semester-5 Minimum Semester Credit Required: 19 |        |         |
|             | Cumulative Semester Credit Required : 94        |        |         |
| Course code | Subject Name                                    | L-T- P | Credits |
| BCA-501     | Data Science                                    | 3-0-2  | 4       |
| BCA-502     | Internet of Things                              | 3-0-2  | 4       |
| BCA-503     | Software Project Management                     | 3-0-0  | 3       |
| BCA-504     | Skill Development - Computer Hardware           | 0-0-2  | 2       |
| BCA-505P    | Minor Project                                   | 0-0-4  | 4       |
| Total       |   |        | 19      |

| Semester-6  | Minimum Semester Credit Required: 26      |        |         |
|-------------|---|--------|---------|
|             | Cumulative Semester Credit Required : 120 |        |         |
| Course code | Subject Name                              | L-T- P | Credits |
| BCA-601P    | Major Project / Internship                | 0-0-26 | 26      |
| Total       |   |        | 26      |

There shall be compulsory summer training at the end of the Second Semester in the concerned industry for 6 to 8 weeks as decided by the Dean of the Faculty of Technology and Engineering.

Note: L- Lecture, T-Tutorial, P-Practical/Project, C-Credit