



# Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to **VTU**  
Approved by **AICTE**  
Accredited by **NAAC** with **A+** Grade  
6 Programs Accredited by **NBA**  
(CSE, ISE, ECE, EEE, MECH, CIVIL)

## Scheme of Teaching and Examinations – 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from 2024-25)

### 5<sup>th</sup> SEMESTER: Computer Science & Engineering (CSE)

| Sl. No | Course Code | Course Title   | Course Category | BOS                         | TD   | Teaching Hours/Week   |          |           |         |       | Credits | Examination        |           |           |             |
|--------|-------------|--|-----------------|-----------------------------|------|---|----------|-----------|---------|-------|---------|--------------------|-----------|-----------|-------------|
|        |             |  |                 |                             |      | Lecture   | Tutorial | Practical | Project | Total |         | SEE Duration (Hrs) | CIE Marks | SEE Marks | Total Marks |
|        |             |  |                 |                             |      | L   | T        | P         | S       |       |         |                    |           |           |             |
| 1      | BCS501      | Fundamentals of Computer Graphics & Vision                   | IPCC1           | CSE                         | CSE  | 3   | 0        | 2         | 0       | 5     | 4       | 04                 | 50        | 50        | 100         |
| 2      | BCS502      | Machine Learning with Lab                                    | IPCC2           | CSE                         | CSE  | 3   | 0        | 2         | 0       | 5     | 4       | 02                 | 50        | 50        | 100         |
| 3      | BCS503      | Software Engineering, Design Patterns and Project Management | PCC1            | CSE                         | CSE  | 3   | 0        | 0         | 0       | 3     | 3       | 04                 | 50        | 50        | 100         |
| 4      | BCSL504     | Next Generation Embedded Lab                                 | AEC             | CSE                         | CSE  | 0   | 0        | 2         | 0       | 2     | 1       | 02                 | 50        | 50        | 100         |
| 5      | BCS515X     | Professional Elective Course                                 | PEC             | CSE                         | CSE  | 3   | 0        | 0         | 0       | 3     | 3       | 03                 | 50        | 50        | 100         |
| 6      | BCS586      | Mini Project   | PROJ            | CSE                         | CSE  | 0   | 0        | 0         | 4       | 4     | 2       | -                  | 100       | -         | 100         |
| 7      | BRMK557     | Research Methodology and IPR                                 | PCC2            | CSE                         | CSE  | 3   | 0        | 0         | 0       | 3     | 3       | 04                 | 50        | 50        | 100         |
| 8      | BCS508      | Environmental Studies and E-waste Management                 | HSMS            | HSMS                        | HSMS | 1   | 0        | 0         | 0       | 1     | 1       | 01                 | 50        | 50        | 100         |
| 9      | BINT510     | Internship   | INT             | CSE                         | CSE  | 4 weeks Internship to be completed during the intervening period of IV and V semesters by students and evaluation will be done at the end of 5th semester |          |           |         |       | 1       | 2                  | 50        | -         | 50          |
| Total  |             |  |                 |                             |      | 16  | 0        | 6         | 0       | 26    | 22      | 20                 | 500       | 350       | 850         |
| 10     | BNSK559     | National Service Scheme (NSS)                                | MC              | NSS Coordinator             |      | 0   | 0        | 2         | 0       |       | 0       |                    | 100       |           | 100         |
|        | BPEK559     | Physical Education (PE) (Sports and Athletics)               |                 | Physical Education Director |      |   |          |           |         |       |         |                    |           |           |             |
|        | BYOK559     | Yoga   |                 | Yoga Teacher                |      |   |          |           |         |       |         |                    |           |           |             |

| Professional Elective Course |   |             |
|------------------------------|---|-------------|
| Sl. No                       | Course                                    | Course Code |
| 1                            | Theory of Computation and Compiler Design | BCS515A     |
| 2                            | NoSQL                                     | BCS515B     |
| 3                            | Cryptography and Network Security         | BCS515C     |



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### 6<sup>th</sup> SEMESTER: Computer Science & Engineering (CSE)

| Sl. No | Course Code | Course Title                                   | Course Category | BOS                         | TD  | Teaching Hours/Week |          |           |         |       | Credits | Examination        |           |           |             |
|--------|-------------|--|-----------------|-----------------------------|-----|---------------------|----------|-----------|---------|-------|---------|--------------------|-----------|-----------|-------------|
|        |             |  |                 |                             |     | Lecture             | Tutorial | Practical | Project | Total |         | SEE Duration (Hrs) | CIE Marks | SEE Marks | Total Marks |
|        |             |  |                 |                             |     | L                   | T        | P         | S       |       |         |                    |           |           |             |
| 1      | BCS601      | Cloud Computing (Open Stack/Google)            | IPCC1           | CSE                         | CSE | 3                   | 0        | 2         | 0       | 5     | 4       | 03                 | 50        | 50        | 100         |
| 2      | BCS602      | Mobile Application Development                 | IPCC1           | CSE                         | CSE | 3                   | 0        | 2         | 0       | 5     | 4       | 03                 | 50        | 50        | 100         |
| 3      | BCS603      | Artificial Intelligence                        | PCC1            | CSE                         | CSE | 3                   | 0        | 0         | 0       | 3     | 3       | 03                 | 50        | 50        | 100         |
| 4      | BCS604      | Bigdata Analytics                              | PCC2            | CSE                         | CSE | 3                   | 0        | 0         | 0       | 3     | 3       | 03                 | 50        | 50        | 100         |
| 5      | BCS615x     | Professional Elective Course                   | PEC2            | CSE                         | CSE | 3                   | 0        | 0         | 0       | 3     | 3       | 03                 | 50        | 50        | 100         |
| 6      | BXX654x     | Open Elective Course                           | OEC             |                             |     | 3                   | 0        | 0         | 0       | 3     | 3       | 03                 | 50        | 50        | 100         |
| 7      | BCS685      | Mini Project                                   | PROJ            | CSE                         | CSE | 0                   | 0        | 0         | 4       | 4     | 2       | -                  | 100       | -         | 100         |
| Total  |             |  |                 |                             |     | 15                  | 0        | 6         | 4       | 25    | 22      | 20                 | 400       | 300       | 700         |
| 8      | BIKS609     | Indian Knowledge System                        | MC              | CSE                         | CSE | 2                   | 0        | 0         | 0       | 2     | 0       | -                  | 100       | -         | 100         |
| 9      | BNSK658     | National Service Scheme NSS                    | MC              | NSS Coordinator             |     | 0                   | 0        | 2         | 0       | 0     |         |                    | 100       |           | 100         |
|        | BPEK658     | Physical Education (PE) (Sports and Athletics) |                 | Physical Education Director |     |                     |          |           |         |       |         |                    |           |           |             |
|        | BYOK658     | Yoga   |                 | Yoga Teacher                |     |                     |          |           |         |       |         |                    |           |           |             |

| Professional Elective Course |                       |             |
|------------------------------|-----------------------|-------------|
| Sl. No                       | Course                | Course Code |
| 1                            | Prompt Engineering    | BCS615A     |
| 2                            | Blockchain Technology | BCS615B     |
| 3                            | Distributed Systems   | BCS615C     |

| Open Elective Course |                             |             |
|----------------------|-----------------------------|-------------|
| Sl. No               | Course                      | Course Code |
| 1                    | Java Programming using OOPS | BCS654A     |
| 2                    | Computer Networks           | BCS654B     |
| 3                    | Data Visualization          | BCS654C     |