

VIVEKANANDCOLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)
Teaching & Evaluation Scheme
Three/ Years UG Program
Department/Subject Specific Core or Major (DSC)
As per NEP 2020
Department of B.Sc. Computer Science Entire
B.Sc. Computer Science entire-I Semester-I & II

| Sr. No. | Course Abbr. | Course Name | Teaching Scheme Hours/week | | Examination Scheme and Marks | | | | Course Credits |
|--------------------------|--------------|------------------------------|----------------------------|-----------|------------------------------|-----------|------------|------------|----------------|
| | | | TH | PR | ESE | CIE | PR | Marks | |
| Semester -I | | | | | | | | | |
| 1 | DSC-I | Introduction to computers-I | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-II | Programming in C-I | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | MIN-I | Analog Electronics | 2 | - | 40 | 10 | - | 50 | 2 |
| 4 | MIN-II | Digital Electronics-I | 2 | - | 40 | 10 | - | 50 | 2 |
| 5 | OEC-I | Foundational maths | 2 | - | 40 | 10 | - | 50 | 2 |
| 6 | OEC-II | Descriptive Statistics-I | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | AEC-I | Business Communication-I | 2 | - | 40 | 10 | - | 50 | 2 |
| 8 | IKS-I | Indian knowledge System | 2 | - | 25 | - | - | 25 | 2 |
| 9 | DSC-PR-I | DSC Computer Lab-1 | - | 4 | - | - | 25 | 25 | 2 |
| 10 | MIN-PR-I | MIN Electronics Lab-1 | - | 4 | - | - | 25 | 25 | 2 |
| 11 | OEC-PR-I | OEC Maths Lab-1 | - | 2 | - | - | 25 | 25 | 1 |
| 12 | OEC-PR-I | OEC StatisticsLab-1 | - | 2 | - | - | 25 | 25 | 1 |
| Semester –I Total | | | 16 | 12 | 305 | 70 | 100 | 475 | 22 |
| Semester-II | | | | | | | | | |
| 1 | DSC-III | Introduction to computers-II | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-IV | Programming in C- II | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | MIN-III | Instrumentation | 2 | - | 40 | 10 | - | 50 | 2 |
| 4 | MIN-IV | Digital Electronics-II | 2 | - | 40 | 10 | - | 50 | 2 |
| 5 | OEC-III | Operational Research | 2 | - | 40 | 10 | - | 50 | 2 |
| 6 | OEC-IV | Descriptive Statistics-II | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | SEC-II | Introduction to Excel | | 4 | | | 25 | 25 | 2 |
| 8 | AEC-II | Business Communication-II | 2 | | 40 | 10 | | 50 | 2 |
| 9 | DSC-PR-I | DSC Computer Lab-2 | - | 4 | - | - | 25 | 25 | 2 |
| 10 | MIN-PR-I | MIN Electronics Lab-2 | - | 4 | - | - | 25 | 25 | 2 |
| 11 | OEC-PR-I | OEC Maths Lab-2 | - | 2 | - | - | 25 | 25 | 1 |
| 12 | OEC-PR-I | OEC StatisticsLab-2 | - | 2 | - | - | 25 | 25 | 1 |
| Semester-II Total | | | 14 | 16 | 280 | 70 | 125 | 475 | 22 |

B.Sc. Computer Science Entire –II Semester- III & IV

| Sr. No. | Course Abbr. | Course Name | Teaching Scheme Hours/week | | Examination Scheme and Marks | | | | Course Credits |
|----------------------------|--------------|---|----------------------------|-----------|------------------------------|-----------|------------|------------|----------------|
| | | | TH | PR | ESE | CIE | PR | Marks | |
| Semester-III | | | | | | | | | |
| 1 | DSC-V | OOP with C++ | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-VI | RDBMS with SQL Server | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | MIN-V | 8051 Microcontroller | 2 | - | 40 | 10 | - | 50 | 2 |
| 4 | SEC-III | Introduction to R | - | 4 | - | - | 25 | 25 | 2 |
| 5 | SEC-IV | Statistical methods using R | - | 4 | - | - | 25 | 25 | 2 |
| 6 | AEC-III | Communication Skills -I | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | VEC-I | Democracy, Election and Good Governance(DEGG) | 2 | - | 50 | - | - | 50 | 2 |
| 8 | VEC-II | Environmental Studies-I | 2 | - | 35 | - | 15 | 50 | 2 |
| 9 | DSC-PR-II | DSC Computer Lab-3 | - | 8 | - | - | 50 | 50 | 4 |
| 10 | MIN-PR-II | MIN ElectronicsLab-3 | - | 4 | - | - | 25 | 25 | 2 |
| Semester –III Total | | | 12 | 20 | 245 | 40 | 140 | 425 | 22 |
| Semester -IV | | | | | | | | | |
| 1 | DSC-VII | Data structure | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-VIII | Advanced Web Technology | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | MIN-VI | Raspberry Pi | 2 | - | 40 | 10 | - | 50 | 2 |
| 4 | SEC-V | Statistical methods using MINITAB | - | 4 | - | - | 25 | 25 | 2 |
| 5 | SEC-VI | Statistical methods using PYTHON | - | 4 | - | - | 25 | 25 | 2 |
| 6 | AEC-IV | Communication Skills -II | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | VEC-III | Environmental Studies-II | 2 | - | 35 | - | 15 | 50 | 2 |
| 8 | CC | Co-Curriculum Courses | 2 | - | 50 | - | - | 50 | 2 |
| 9 | DSC-PR-II | DSC Computer Lab-4 | - | 8 | - | - | 50 | 50 | 4 |
| 10 | MIN-PR-II | MIN ElectronicsLab-4 | - | 4 | - | - | 25 | 25 | 2 |
| Semester –IV Total | | | 12 | 20 | 245 | 40 | 140 | 425 | 22 |

B.Sc.-Computer Science entire-III Semester- V & VI

| Sr. No. | Course Abbr. | Course Name | Teaching Scheme Hours/week | | Examination Scheme and Marks | | | | Course Credits |
|---|--------------|----------------------------------|----------------------------|-----------|------------------------------|-----------|------------|-------------|----------------|
| | | | TH | PR | ESE | CIE | PR | Marks | |
| Semester V | | | | | | | | | |
| 1 | DSC-IX | Operating System | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-X | Core Java | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | DSC-XI | C# Programming | 2 | | 40 | 10 | - | 50 | 2 |
| 4 | DSC-XII | PHP Programming | 2 | - | 40 | 10 | - | 50 | 2 |
| 5 | DSE-I | Software engineering with UML OR | 2 | - | 40 | 10 | - | 50 | 2 |
| | | E-Commerce | | | | | | | |
| 6 | MIN-VII | Introduction to IOT | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | FP | Field Project | - | - | - | - | 50 | 50 | 2 |
| 8 | DSC-PR-III | DSC Computer Lab-A5 | - | 4 | - | - | 25 | 25 | 2 |
| 9 | DSC-PR-IV | DSC Computer Lab-B5 | - | 4 | - | - | 25 | 25 | 2 |
| 10 | DSC-PR-V | DSC Computer Lab-C5 | - | 4 | - | - | 25 | 25 | 2 |
| 11 | DSC-PR-VI | DSC Computer Lab-D5 | - | 4 | - | - | 25 | 25 | 2 |
| | | Semester V Total | 12 | 16 | 240 | 60 | 150 | 450 | 22 |
| Semester VI | | | | | | | | | |
| 1 | DSC-XIII | Linux OS | 2 | - | 40 | 10 | - | 50 | 2 |
| 2 | DSC-XIV | Advanced Java | 2 | - | 40 | 10 | - | 50 | 2 |
| 3 | DSC-V | Advanced C# | 2 | - | 40 | 10 | - | 50 | 2 |
| 4 | DSC-XVI | Android Programming | 2 | - | 40 | 10 | - | 50 | 2 |
| 5 | DSE-II | Artificial Intelligence OR | 2 | - | 40 | 10 | - | 50 | 2 |
| | | Data Mining | | | | | | | |
| 6 | MIN-VIII | Computer Networks | 2 | - | 40 | 10 | - | 50 | 2 |
| 7 | OJT | On Job Training | | | | | 50 | 50 | 2 |
| 8 | DSC-PR-III | DSC Computer Lab-A6 | - | 4 | - | - | 25 | 25 | 2 |
| 9 | DSC-PR-IV | DSC Computer Lab-B6 | - | 4 | - | - | 25 | 25 | 2 |
| 10 | DSC-PR-V | DSC Computer Lab-C6 | - | 4 | - | - | 25 | 25 | 2 |
| 11 | DSC-PR-VI | DSC Computer Lab-D6 | - | 4 | - | - | 25 | 25 | 2 |
| | | Semester VI Total | 12 | 16 | 240 | 60 | 150 | 450 | 22 |
| Total marks for 3 years degree program | | | | | | | | 2700 | |

Abr. TH-Theory, PR-Practical, ESE- End Semester Examination, CIE-Continuous Internal Examination

Note: Minimum passing for 40 marks Theory paper = 16 marks
Minimum passing for 10 marks Internal evaluation = 4 marks
Minimum passing for 50 marks Practical = 20 marks
Minimum passing for 100 marks Practical = 40 marks
Minimum passing for 200 marks Practical = 80 marks
Passing percentage for Democracy, Election and Good Governance (DEGG) and
Environmental Studies papers should be 40%
Separate passing for every head- ESE, CIE and Practicals