

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Faculty of Science and Technology

Choice Based Credit System (CBCS),(w.e.f. 2022-23) Revised Structure for B.Sc.(Entire Computer Science)-I

| Subject/ Core Course | Name and Type of the Paper | | No. of papers/ Practical | Hrs./week | | | Total Marks Per Paper | UA | CA | Credits |
|--|--|-----------|--------------------------------|-----------|----|-----------|--------------------------------|-------------|------------|-----------|
| | Type | Name | | L | T | P | | | | |
| Class : | B.Sc. .(Entire Computer Science)- I Semester – I | | | | | | | | | |
| Ability Enhancement Compulsory Course (AECC) | English Paper I Part-A (communication skill) | | | 4.0 | | | 50 | 40 | 10 | 2.0 |
| *Core Courses | DSC 1A | Paper- I | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-II | | 2.5 | -- | -- | 50 | 40 | 10 | |
| | DSC 2A | Paper-I | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-II | | 2.5 | -- | -- | 50 | 40 | 10 | |
| | **DSC 3A | Paper-I | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-II | | 2.5 | -- | -- | 50 | 40 | 10 | |
| ***DSC 4A | Paper-I | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 | |
| | Paper-II | | 2.5 | -- | -- | 50 | 40 | 10 | | |
| Total | | | | 24 | -- | -- | 450 | 360 | 90 | 18 |
| Class : | B.Sc. .(Entire Computer Science)- I Semester – II | | | | | | | | | |
| Ability Enhancement Course(AECC) | English Paper I Part-B (communication skill) | | | 4.0 | | | 50 | 40 | 10 | 2.0 |
| *Core Courses | DSC 1B | Paper-III | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-IV | | 2.5 | -- | -- | 50 | 40 | 10 | |
| | DSC 2B | Paper-III | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-IV | | 2.5 | -- | -- | 50 | 40 | 10 | |
| | **DSC 3B | Paper-III | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | Paper-IV | | 2.5 | -- | -- | 50 | 40 | 10 | |
| ***DSC 4B | Paper-III | | 2.5 | -- | -- | 50 | 40 | 10 | 4.0 | |
| | Paper-IV | | 2.5 | -- | -- | 50 | 40 | 10 | | |
| | Democracy, Elections and Good Governance | | | 3 | | | 50 | 40 | 10 | NC |
| Total (Theory) | | | | 24 | -- | -- | 450 | 360 | 90 | 18 |
| Core Practical | DSC 1 A & 1B | | Practical I | -- | -- | 4 | 100 | 80 | 20 | 4.0 |
| | DSC 2 A & 2B | | Practical I | -- | -- | 4 | 100 | 80 | 20 | 4.0 |
| | DSC 3A & 3B | | Practical I | -- | -- | 4 | 100 | 80 | 20 | 4.0 |
| | DSC 4A & 4B | | Practical I | -- | -- | 4 | 100 | 80 | 20 | 4.0 |
| Total (Pract.) | | | | | | 16 | 400 | 320 | 80 | 16 |
| Grand Total | | | | 48 | | 16 | 1300 | 1040 | 260 | 52 |

***Core Courses: DSC 1A , DSC 1B, DSC 2A and DSC 2B (Core computer science courses)**

****Generic Electives: DSC 3A and DSC 3B: Mathematics**

*****Generic Electives : DSC 4A and DSC 4B: Electronics**

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Faculty of Science & Technology

Choice Based Credit System (CBCS)(w.e.f.2023-24) Revised Structure for B.Sc.(Entire Computer Science)-II

| Subject/ Core Course | Name and Type of the Paper | | No. of papers/ Practical | Hrs./week | | | Total Marks Per Paper | UA | CA | Credits | |
|--|----------------------------|-------------|-----------------------------|------------|----|-----------|--------------------------|------------|------------|-----------|-----|
| | Type | Name | | L | T | P | | | | | |
| Class : B.Sc. .(Entire Computer Science)- II Semester – III | | | | | | | | | | | |
| ****Core Courses DSC 1C and DSC 2C are compulsory while student can select either # DSC 3C/GE-3C or AIC-1A as a third subject. | DSC 1C | AIC-1A | Paper-V | 3 | -- | -- | 50 | 40 | 10 | 4.0 | |
| | | | Paper-VI | 3 | -- | -- | 50 | 40 | 10 | | |
| | DSC 2C | | | Paper-V | 3 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | | | Paper-VI | 3 | -- | -- | 50 | 40 | 10 | |
| | # DSC 3C | | | Paper-V | 3 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | | | Paper-VI | 3 | -- | -- | 50 | 40 | 10 | |
| Total Sem-III | | | | 18 | -- | -- | 300 | 240 | 60 | 12 | |
| | | | \$SEC-1 | 4 | -- | | 100 | 80 | 20 | 4 | |
| Class : B.Sc. .(Entire Computer Science)- II Semester IV | | | | | | | | | | | |
| ****Core Courses DSC 1D and DSC 2D are compulsory while student can select either # DSC 3D/GE-3D or AIC-1B as a third subject. | DSC 1D | AIC-1B | Paper-VII | 3 | -- | -- | 50 | 40 | 10 | 4.0 | |
| | | | Paper-VIII | 3 | -- | -- | 50 | 40 | 10 | | |
| | DSC 2D | | | Paper-VII | 3 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | | | Paper-VIII | 3 | -- | -- | 50 | 40 | 10 | |
| | # DSC 3D | | | Paper-VII | 3 | -- | -- | 50 | 40 | 10 | 4.0 |
| | | | | Paper-VIII | 3 | -- | -- | 50 | 40 | 10 | |
| | | | Environmental Studies | 3 | -- | -- | 50 | 40 | 10 | NC | |
| Total Sem-IV | | | | 18 | | | 300 | 240 | 60 | 12 | |
| Total (Theory) | | | | 36 | -- | -- | 600 | 480 | 120 | 24 | |
| Core Practical | DSC 1C & 1D | AIC 1A & 1B | Pr. II & III | -- | -- | 8 | 200 | 160 | 40 | 4.0 | |
| | DSC 2C & 2D | | Pr. II & III | -- | -- | 8 | 200 | 160 | 40 | 4.0 | |
| | DSC 3C & 3D | | Pr. II & III | -- | -- | 8 | 200 | 160 | 40 | 4.0 | |
| Total (Practical's) | | | | | | 24 | 600 | 480 | 120 | 24 | |
| Grand Total | | | | 36 | | 24 | 1800 | 960 | 240 | 48 | |
| | | | \$SEC | 4 | | | 100 | 80 | 20 | 4 | |

******Core Courses: DSC 1C, DSC 2C, DSC 1D and DSC 2D (Core computer science courses)**

Generic Electives: DSC 3C and DSC 3D : Statistics

Additional Interdisciplinary Courses - Bioinformatics Optimization technics/Computational Geometry/Data Analytics /NCC etc.

\$The students can choose MOOCs/ NPTEL/SWAYAM/Pathshala/Add-on / Skill based courses of university/college initiated courses of same credits.

\$ These courses are not compulsory, but after completion of these courses students get additional credits on their mark lists.

\$ SEC courses run by colleges should be communicated to university for information & necessary action.

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Faculty of Science & Technology

Choice Based Credit System (CBCS)(w.e.f.2024-25) Revised Structure for B.Sc.(Entire Computer Science)-III

| Subject/ Core Course | Name and Type of the Paper | | No. of papers/ Practical | Hrs/week | | | Total Marks Per Paper | UA | CA | Credits |
|----------------------------------|----------------------------|---|--------------------------|-----------|-----------|-----------|-----------------------|-------------|------------|-----------|
| | Type | Name | | L | T | P | | | | |
| Class : | | B.Sc. .(Entire Computer Science)- III Semester - V | | | | | | | | |
| Ability Enhancement Course(AECC) | | English (Business English) | Paper II Part A | 4 | -- | -- | 50 | 40 | 10 | 2.0 |
| Core Courses: | | %DSC 1 E | Paper IX | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSC 1 F | Paper X | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSC 1 G | Paper XI | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSE 1 A/B/C (Select either A or B or C) | Paper XII | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | | | | | | | | | |
| Total Theory Sem-V | | | | 20 | -- | -- | 450 | 360 | 90 | 18 |
| | SEC-2 | | | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| Class : | | B.Sc. .(Entire Computer Science)- III Semester –VI | | | | | | | | |
| Ability Enhancement Course(AECC) | | English (Business English) | Paper II Part B | 4 | -- | -- | 50 | 40 | 10 | 2.0 |
| Core Courses: | | %DSC 1 H | Paper XIII | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSC 1 I | Paper XIV | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSC 1 J | Paper XV | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | DSE 2 A/B/C (Select either A or B or C) | Paper XVI | 4 | -- | -- | 100 | 80 | 20 | 4.0 |
| | | | | | | | | | | |
| Total Theory Sem-VI | | | | 20 | -- | -- | 450 | 360 | 90 | 18 |
| Core | | Project | Practical IV | -- | -- | 5 | 100 | 80 | 20 | 4.0 |
| | | DSC 1F & 1 I | Practical V | -- | -- | 5 | 100 | 80 | 20 | 4.0 |
| | | DSC 1G & 1 J | Practical VI | -- | -- | 5 | 100 | 80 | 20 | 4.0 |
| | | DSE 1A/B/C & 2 A/B/C | Practical VII | -- | -- | 5 | 100 | 80 | 20 | 4.0 |
| Total (practical) | | | | | | 20 | 400 | 320 | 80 | 16 |
| Grand Total | | | | 40 | | 20 | 1300 | 1040 | 260 | 52 |
| | \$SEC | | | 4 | | | 100 | 80 | 20 | 4 |

% Theory paper: (Core Computer Science Course)

\$The students can choose MOOCs/ NPTEL/SWAYAM/Pathshala/Add-on / Skill based courses of university/college initiated courses of same credits.

\$ These courses are not compulsory, but after completion of these courses students get additional credits on their Mark lists. \$SEC Courses initiated by colleges should be communicated to university for information and necessary action.

Summary of the Structure of B.Sc. Program as per CBCS pattern

| Class | Semester | Marks-Theory | Credits-Theory | Marks-Practical | Credits-Practical's | Total - credits |
|------------------|-----------------|--------------|----------------|-----------------|---------------------|-----------------|
| B.Sc.-I | I | 450 | 18 | -- | -- | 18 |
| | II | 450 | 18 | 400 | 16 | 34 |
| B.Sc.-II | III | 300 | 12 | -- | -- | 12 |
| | IV | 300 | 12 | 600 | 24 | 36 |
| B.Sc.-III | V | 450 | 18 | -- | -- | 18 |
| | VI | 450 | 18 | 400 | 16 | 34 |
| Total | | 2400 | 96 | 1400 | 56 | 152 |
| | SEC sem-III & V | 200 | 8 | | | 8 |

B.Sc. Programme :

Total Marks : Theory + Practical's = 2400(+200) +1400 =3800+200

Credits : Theory + Practical's = 96(08) + 56 = 152+08

Numbers of Papers Theory: Ability Enhancement Compulsory Course (AECC) 04
 Theory: Discipline Specific Core Paper (DSC) 20
 Theory: Discipline Specific Elective paper(DSE) 02
 Skill Enhancement Course (SEC) 04

Total : Theory Papers (Core paper-22)30
 : Practical Papers 11

Abbreviations:

L: Lectures T: Tutorials P: Practical UA : University Assessment CA : College Assessment CC: Core Course AEC : Ability Enhancement Course DSE : Discipline Specific Elective Paper SEC : Skill Enhancement Course, AIC: Additional Interdisciplinary Courses GE: Generic Electives

Note: Each theory papers of 50 Marks should be of two Units.
 Each theory papers of 100 Marks should be of four Units.
 Each theory paper Unit is of 15 Lectures.
 Practical paper of 100 Marks is of at least 20 practical.