**Ahmednagar Jilha Maratha Vidya Prasarak Samaj’s**

**New Arts, Commerce, and Science College, Ahmednagar**

**(Autonomous)**

**(Affiliated to Savitribai Phule Pune University, Pune)**



**National Education Policy (NEP)**

**Choice Based Credit System (CBCS)**

**Programme Skeleton and Syllabus of**

**Open Elective (OE)**

**Computational Science
(Computer Science, B.C.A. Science, Data Science, Cloud Computing)**

**Implemented from**

**Academic Year 2023-24**

**Credit Distribution: UG Programme**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Type of Courses  | III Yr | IV Yrs (Honours) | IV YrsResearch  |
| Major Computer Science | Discipline-Specific Courses (DSC)  | 46 | 74 | 66 |
| Discipline Specific Elective (DSE) | 08 | 16 | 16 |
| Skill Enhancement Courses (SEC) | 06 | 06 | 06 |
| Vocational Skill Courses (VSC) | 08 | 08 | 08 |
| On-Job Training (OJT) | 04 | 08 | 04 |
| Field Project (FP) | 04 | 04 | 04 |
| Community Engagement and Service (CEP) | 02 | 02 | 02 |
| Research project | 00 | 00 | 12 |
| Research Methodology | 00 | 04 | 04 |
| Indian Knowledge System | 02 | 02 | 02 |
|  | Total (I, II and III Year)  | 80 | 124 | 124 |
| Minor  | Minor | 20 | 20 | 20 |
| OtherCourses  | Open Elective (OE)/ Multidisciplinary Courses  | 12 | 12 | 12 |
| Co-Curricular Courses | 08 | 08 | 08 |
| Ability Enhancement Courses | 08 | 08 | 08 |
| Value Education Courses | 04 | 04 | 04 |
| Total | 132 | 176 | 176 |

**Bucket list of Open Elective Courses (OE) offered by the college**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. |  School/Department | Department | Credits/Course | Courses | Total Credits |
|  | Marathi | Marathi | 03 | 04 | 12 |
|  | Hindi | Hindi | 03 | 04 | 12 |
|  | English | English | 03 | 04 | 12 |
|  | Economics | Economics | 03 | 04 | 12 |
|  | Social Sciences | History, Political Science Sociology, Defense Studies | 03 | 04 | 12 |
|  | Mental and Moral Sciences | Philosophy Psychology | 03 | 04 | 12 |
|  | Music | Music  | 03 | 04 | 12 |
|  | Commerce  | Commerce  | 03 | 04 | 12 |
|  | Management | BBA and BBA (CA) | 03 | 04 | 12 |
|  | Chemical Science  | Chemistry  | 03 | 04 | 12 |
|  | Life Sciences | Botany, Zoology, Microbiology, and Biotechnology  | 03 | 04 | 12 |
|  | Physical Sciences | Physics and Electronics  | 03 | 04 | 12 |
|  | Mathematical Science | Mathematics and Statistics  | 03 | 04 | 12 |
|  | Computational Science  | CASAS | 03 | 04 | 12 |
|  | Media Studies | Communication Studies and Animation  | 03 | 04 | 12 |
|  | Earth and Environmental Science  | Geography and Environmental Science  | 03 | 04 | 12 |

**List of OE under the Faculty of Science**

**Open for Commerce and Humanities(Arts)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Offering Departments  | OE-01 | OE-02 | OE-03 | OE-04 |
|  | Credits  | 03 | 03 | 03 | 03 |
|  | Chemical Science  | ABC | ABC | ABC | ABC |
|  | Life Sciences | ABC | ABC | ABC | ABC |
|  | Physical Sciences | ABC | ABC | ABC | ABC |
|  | Mathematical Science | ABC | ABC | ABC | ABC |
|  | Computational Science  | ABC | ABC | ABC | ABC |
|  | Media Studies | ABC | ABC | ABC | ABC |
|  | Earth and Environmental Science  | ABC | ABC | ABC | ABC |

**List of OE under the Faculty of Commerce**

**Open for Humanities (Arts) and Science**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No.  | Offering Departments  | OE-01 | OE-02 | OE-03 | OE-04 |
|  | Credits  | 03 | 03 | 03 | 03 |
| 1. | Commerce  | ABC | ABC | ABC | ABC |
| 2. | Management | ABC | ABC | ABC | ABC |

**List of OE under the Faculty of Humanities(Arts)**

**Open for Commerce and Science**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No.  | Offering Departments  | OE-01 | OE-02 | OE-03 | OE-04 |
|  | Credits  | 03 | 03 | 03 | 03 |
|  | Marathi | ABC | ABC | ABC | ABC |
|  | Hindi | ABC | ABC | ABC | ABC |
|  | English | ABC | ABC | ABC | ABC |
|  | Economics | ABC | ABC | ABC | ABC |
|  | Social Sciences | ABC | ABC | ABC | ABC |
|  | Mental and Moral Sciences | ABC | ABC | ABC | ABC |
|  | Music | ABC | ABC | ABC | ABC |

**Programme Framework (Courses and Credits): Open Elective (OE) in**

 **Computational Science**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sr. No. |  Year | Semester | Level | Course Type | Course Code  | Title  | Credits |
|  | I | I | 4.5 | OE-01 | OE-01 | BasicTally  | 03 |
|  | I | II | 4.5 | OE-02 | OE-02 | Advanced Tally | 03 |
|  | I | III | 5.0 | OE-03 | OE-03 | Office Automation | 03 |
|  | I | IV | 5.0 | OE-04 | OE-04 | E-Commerce | 03 |
|  |  |  |  |  |  |  | 12  |

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**Syllabus**

**Open Elective (OE)**

|  |
| --- |
| Title of the Course: Basic Tally |
| Year: I | Semester: I |
| CourseType  | Course Code | Credit Distribution | Credits | Allotted Hours | Allotted Marks |
| Theory | Practical |
| CIE | ESE | Total |
| OE-1 | OE-1 | 03 | 00 | 03 | 45 | 30 | 70 | 100 |

**Learning Objectives:**

* Preparation of Financial Statements.
* Recording of day to day accounting transactions.
* Clarity on accounting fundamentals.
* Banking and vendor/customer ledger reconciliation.

**Course Outcomes (Cos)**

1. After successfully completion of this course, students will be work with well-known accounting software i.e. Tally.
2. Student by their own will create company, enter accounting voucher entries including advance voucher entries, reconcile bank statements, do accrual adjustments, and also print financial statements, etc. in Tally software.
3. Students will possess required skill and can also be employed as Tally data entry operator.

**Detailed Syllabus:**

Unit I: Introduction to TallyPrime. (Allotted Lectures 03)

Unit II: Maintaining chart of Account. (Allotted Lectures 06)

Unit III: Recording and maintaining accounting transactions. (Allotted Lectures 07)

Unit IV: Banking (Allotted Lectures 08)

Unit V: Generating financial statements and MIS reports. (Allotted Lectures 06)

Unit VI: Data Security (Allotted Lectures 07)

Unit VII: Company Data Management (Allotted Lectures 08)

**Suggested Readings/Material:**

1. Tally Essential - Level 1, Tally Education Pvt. Ltd.

2. Tally ERP 9 Made Simple Basic Financial Accounting Book by Ashok K Nadhani

3. Tally Erp 9 Power Of Simplicity Book by Shraddha Singh Navneet Mehra

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**Syllabus**

**Open Elective (OE)**

|  |
| --- |
| Title of the Course: Advanced Tally |
| Year: I | Semester: I |
| CourseType  | Course Code | Credit Distribution | Credits | Allotted Hours | Allotted Marks |
| Theory | Practical |
| CIE | ESE | Total |
| OE-2 | OE-2 | 03 | 00 | 03 | 45 | 30 | 70 | 100 |

**Learning Objectives:**

* This course aims to provide the knowledge of advanced features in Tally for overall control and efficiency in operating.
* Functions useful for managers and persons responsible for internal reporting are generation of reports, analysis of financials, tax, Cost / Profit Centres Management ,cost centre reporting, etc.

**Course Outcomes (Cos)**

1. After successfully completion of this course, students will be work with well-known accounting advanced software i.e. Tally.
2. Work with well-known accounting software i.e. Tally ERP 9.
3. Enter accounting voucher entries including advance voucher entries, etc. in Tally ERP 9 software.
4. Possess required skill and can also be employed as Tally data entry operator.
5. Students will possess required skill and can also be employed as Tally data entry operator.

**Detailed Syllabus:**

Unit I: Storage and Classification of Inventory. (Allotted Lectures 04)

Unit II: Account Recievable and Payable Management. (Allotted Lectures 05)

Unit III: Purchase and Sales Order Management (Allotted Lectures 04)

Unit IV: Cost / Profit Centres Management. (Allotted Lectures 05)

Unit V: Generating and Printing Reposrts. (Allotted Lectures 03)

Unit VI: Goods and Services Tax (Allotted Lectures 12)

Unit VII: Tax Deducted at Source (Allotted Lectures 08)

Unit VIII: Management of Business Data (Allotted Lectures 02)

Unit IX: Moving to the next Financial Year. (Allotted Lectures 02)

**Suggested Readings/Material:**

1. Tally Essential - Level 2, Tally Education Pvt. Ltd.

2. Tally Essential - Level 3, Tally Education Pvt. Ltd.

3. Learn Tally ERP 9 with Self-Study Approach by Rakesh Sangwan