



## Jaspuria B.Ed. College, Ranchi

(Affiliated to Ranchi University, Ranchi)

### INSTITUTIONAL VALUE ADDED COURSE (VAC)

## Computer Applications & ICT Integration for Teacher Trainees

(Institution-designed Skill Enhancement Course)

This Institutional Value Added Course has been designed and developed by the Internal Quality Assurance Cell (IQAC), Jaspuria B.Ed. College, Ranchi, with inputs from faculty members and stakeholders, and duly adopted for implementation in the 3rd IQAC Meeting held on 09/03/2019.

*(Signature)*

PRINCIPAL  
JASPURIA B.ED COLLEGE  
BISA, RANCHI

Course Code: JBC-VAC-ICT-01
Applicable Programme: B.Ed.
Offering Department: Department of Education, Jaspuria B.Ed. College
Course Type: Institutional Value Added Course (VAC)
Credits: 02 (Institutional Credits)
Contact Hours: 36 Hours
Mode: Theory + Practical
Medium of Instruction: English / Hindi

<b>1. Introduction</b>
In the contemporary digital era, teachers are expected to be proficient in computer applications and ICT-enabled pedagogy. This Institutional Value Added Course is designed to equip B.Ed. teacher trainees with essential computer skills and practical knowledge required for effective classroom teaching, digital content creation, and professional growth. The course is skill-oriented and supplements the prescribed university curriculum.
<b>2. Objectives of the Course</b>
The course aims to:
<ul style="list-style-type: none"><li>• Develop basic operational skills in computer usage</li></ul>
<ul style="list-style-type: none"><li>• Enable trainees to use office applications for academic and teaching purposes</li></ul>
<ul style="list-style-type: none"><li>• Promote effective integration of ICT in teaching-learning processes</li></ul>
<ul style="list-style-type: none"><li>• Enhance skills in digital teaching aid preparation</li></ul>
<ul style="list-style-type: none"><li>• Foster awareness of cyber safety, ethics, and digital citizenship</li></ul>
<b>3. Course Outcomes</b>
After successful completion of the course, the trainees will be able to:
<ul style="list-style-type: none"><li>• Operate computer systems confidently</li></ul>
<ul style="list-style-type: none"><li>• Prepare digital documents, spreadsheets, and presentations</li></ul>

<ul style="list-style-type: none"> <li>• Design ICT-based teaching-learning materials</li> </ul>
<ul style="list-style-type: none"> <li>• Use internet resources and online tools for education</li> </ul>
<ul style="list-style-type: none"> <li>• Apply ethical and safe practices in digital environments</li> </ul>

#### 4. Duration & Credit System

Duration
<ul style="list-style-type: none"> <li>• Total Contact Hours: 36 Hours</li> </ul>
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Theory: 12 Hours</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Practical: 24 Hours</li> </ul> </li> </ul>
Credit System (Institutional)
<ul style="list-style-type: none"> <li>• Credits Assigned: 02 Institutional Credits</li> </ul>
<ul style="list-style-type: none"> <li>• Credits are awarded for skill certification and academic enrichment</li> </ul>
<ul style="list-style-type: none"> <li>• Institutional credits are not counted towards University CGPA</li> </ul>

#### 5. Course Structure & Detailed Syllabus

Unit I: Fundamentals of Computer Systems (5 Hours)
<ul style="list-style-type: none"> <li>• Introduction to Computers and Applications in Education</li> </ul>
<ul style="list-style-type: none"> <li>• Hardware and Software Components</li> </ul>
<ul style="list-style-type: none"> <li>• Input, Output, and Storage Devices</li> </ul>
<ul style="list-style-type: none"> <li>• Types of Computers</li> </ul>
<ul style="list-style-type: none"> <li>• Operating System: Meaning and Functions</li> </ul>

Unit II: Operating System & File Management (5 Hours)
<ul style="list-style-type: none"> <li>• Basics of Windows / Linux Operating System</li> </ul>
<ul style="list-style-type: none"> <li>• Desktop, Icons, and System Settings</li> </ul>
<ul style="list-style-type: none"> <li>• File and Folder Creation, Organization, and Backup</li> </ul>
<ul style="list-style-type: none"> <li>• Keyboard Shortcuts and Accessibility Tools</li> </ul>
Unit III: Word Processing Applications (6 Hours) ( <i>MS Word</i> )
<ul style="list-style-type: none"> <li>• Creating, Editing, and Formatting Documents</li> </ul>
<ul style="list-style-type: none"> <li>• Paragraph Styles, Tables, and Page Layout</li> </ul>
<ul style="list-style-type: none"> <li>• Inserting Images, Shapes, and Headers/Footers</li> </ul>
<ul style="list-style-type: none"> <li>• Preparation of Question Papers and Worksheets</li> </ul>
<ul style="list-style-type: none"> <li>• Basic Mail Merge</li> </ul>
Unit IV: Spreadsheet Applications (6 Hours) ( <i>MS Excel</i> )
<ul style="list-style-type: none"> <li>• Spreadsheet Concepts and Data Entry</li> </ul>
<ul style="list-style-type: none"> <li>• Cell Referencing and Formatting</li> </ul>
<ul style="list-style-type: none"> <li>• Basic Formulas and Functions</li> </ul>
<ul style="list-style-type: none"> <li>• Preparation of Student Result Sheets</li> </ul>
<ul style="list-style-type: none"> <li>• Charts and Graphs for Academic Data Analysis</li> </ul>
Unit V: Presentation & Digital Teaching Tools (5 Hours) ( <i>MS PowerPoint</i> )
<ul style="list-style-type: none"> <li>• Creating Slides and Slide Layouts</li> </ul>
<ul style="list-style-type: none"> <li>• Design Principles for Effective Teaching</li> </ul>

<ul style="list-style-type: none"> <li>• Inserting Multimedia Elements</li> </ul>
<ul style="list-style-type: none"> <li>• Animations and Transitions</li> </ul>
<ul style="list-style-type: none"> <li>• Preparation of ICT-based Teaching Aids</li> </ul>
<b>Unit VI: Internet, Online Tools &amp; Cyber Ethics (4 Hours)</b>
<ul style="list-style-type: none"> <li>• Internet Basics and Web Browsing</li> </ul>
<ul style="list-style-type: none"> <li>• Educational Websites and E-Resources</li> </ul>
<ul style="list-style-type: none"> <li>• Email and Cloud Storage Tools</li> </ul>
<ul style="list-style-type: none"> <li>• Introduction to Online Teaching Platforms</li> </ul>
<ul style="list-style-type: none"> <li>• Cyber Safety, Ethics, and Digital Citizenship</li> </ul>

6. Session-wise Teaching Plan (36 Hours)

Unit	Session No.	Topics / Activities	Mode	Hours
Unit I: Fundamentals of Computer Systems (5 Hours)	1	Introduction to Computers; ICT in Education	Lecture	2
	2	Hardware, Software, I/O Devices; Types of Computers; OS Meaning & Functions	Lecture + Demo	3
Unit II: Operating System & File Management (5 Hours)	3	Windows/Linux Basics; Desktop, Icons, Settings	Practical	3
	4	File/Folder Creation; Backup; Shortcuts; Accessibility Tools	Practical	2
Unit III: Word Processing (6 Hours)	5	MS Word Basics; Formatting; Layout	Practical	3
	6	Tables, Images, Header/Footer; Question Paper & Worksheet;	Practical	3

		Basic Mail Merge		
Unit IV: Spreadsheet Applications (6 Hours)	7	Spreadsheet Basics; Data Entry; Cell Referencing	Practical	3
	8	Functions, Result Sheet, Charts & Graphs	Practical	3
Unit V: Presentation & Digital Teaching Tools (5 Hours)	9	PowerPoint Basics; Slide Layouts; Design Principles	Practical	2
	10	Multimedia Insertion; Animations; ICT-Based Teaching Aids	Practical	3
Unit VI: Internet, Online Tools & Cyber Ethics (4 Hours)	11	Internet Basics; Email; Cloud Storage; E-resources	Lecture + Practical	2
	12	Online Teaching Platforms; Cyber Safety & Digital Ethics	Demo + Lecture	2
Project & Evaluation (5 Hours)	13	Mini Project: Digital Teaching Aid Preparation	Practical	3
	14	Practical Examination & Viva Voce	Evaluation	2
TOTAL HOURS	—	—	—	36 Hours

<b>7. Teaching–Learning Methods</b>
<ul style="list-style-type: none"> <li>• Interactive Lectures</li> </ul>
<ul style="list-style-type: none"> <li>• Demonstrations</li> </ul>
<ul style="list-style-type: none"> <li>• Hands-on Practical Sessions</li> </ul>
<ul style="list-style-type: none"> <li>• Project-based Learning</li> </ul>
<ul style="list-style-type: none"> <li>• ICT-integrated Teaching Practice</li> </ul>

## 8. Assessment &amp; Evaluation

Component	Marks
Practical Assignments	40
Digital Teaching Aid / Mini Project	30
Practical Test / Viva Voce	20
Attendance	10
<b>Total</b>	<b>100</b>

## 9. Grading System (CBCS-Aligned – Institutional)

Marks (%)	Grade
90–100	O
80–89	A+
70–79	A
60–69	B+
55–59	B
50–54	C
40–49	P
Below 40	F

Pass Criteria: Minimum 40% marks required for successful completion.

## 10. Certification

Students who successfully complete the course will be awarded an Institutional Certificate mentioning the course title, code, credits, and duration.

## 11. Approval &amp; Implementation

This syllabus is approved by the Institutional Academic Committee and implemented from the academic session 2019-20.

  
Coordinator (VAC)

  
Principal  
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Page 7 of 7