



University of Rajasthan Jaipur

**Syllabus of Skill Enhancement Courses
As per UGC Curriculum and CBCS
Framework for Undergraduate Programmes
Under NEP- 2020
For
Three/Four Year Under Graduate Programme in
(Semester – I to VI)
In
Faculty of Arts/Science/Commerce/Social
Science/ Fine Arts**

w.e.f. Academic Session - 2025-26

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अतिरिक्त कुलसचिव
राजस्थान विश्वविद्यालय, जयपुर
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SYLLABUS



SKILL ENHANCEMENT COURSES

(Common to all Undergraduate Programme under the
Faculty of Arts / Commerce / Fine Arts / Science / Social
Sciences)

2025-2028

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SKILL ENHANCEMENT COURSES

Introducing Skill Enhancement courses into the Undergraduate Curriculum under the National Education Policy (NEP) 2020 signifies a significant leap forward in providing students with a holistic and practical education. These courses are crucial in equipping students with technical and professional skills, empowering them to excel and adapt to the dynamic job market. The University of Rajasthan has taken proactive steps in offering a diverse range of Skill Enhancement courses, encompassing domains such as Computer Science, communication, digital literacy, entrepreneurship, and leadership, among others. This invaluable exposure not only aids students in making well-informed career decisions but also substantially enhances their employability prospects. Embracing these skill-oriented courses, the NEP-2020 envisions cultivating a generation of capable and job-ready professionals, fostering a brighter and more promising future for young graduates.

Students enrolled in any undergraduate program at the University and its affiliated/constituent colleges are provided with diverse skill enhancement courses during the **First and Second Semesters**. This pool of courses offers students the opportunity to choose from various options to enrich their skills and knowledge. Students can tailor their learning experiences by selecting courses that align with their interests and career aspirations, ensuring a well-rounded education and enhanced employability prospects. The list of such courses is as follows –

S. No.	Course Code-Course Title	Is offered to NC Students	Total Credit	Delivery Type of the Course	Page No.
1.	SEC-51T-101-Computer Fundamentals	Yes	2	T	05-08
2.	SEC-51P-102-Introduction to Office Productivity Software	No	2	P	09-11
3.	SEC-51P-103-Data Analysis Using Excel	No	2	P	12-14
4.	SEC-51T-104-Business Communication Skills	Yes	2	T	15-17
5.	SEC-51T-105-Effective Communication Skills	No	2	T+P	18-20
6.	SEC-51T-106-Learning Life Skills	No	2	T+P	21-23
7.	SEC-51T-107-Logical and Critical Thinking	Yes	2	T	24-26
8.	SEC-51T-108-Quantitative Aptitude and Data Interpretation	Yes	2	T	27-28
9.	SEC-51T-109-Finance for Everyone	Yes	2	T	29-31
10.	SEC-51T-110- Basics of Tourism Concepts	Yes	2	T	32-34
11.	SEC-51T-111-Data Literacy	Yes	2	T	35-36
12.	SEC-51T-112-Bio-Fertilizer	No	2	T+P	37-39
13.	SEC-51T-113-Nursery and Gardening Techniques	No	2	T+P	40-42
14.	SEC-51T-114-अनुवादकौशल	Yes	2	T	43-45
15.	SEC-51T-115-प्रभावीहिन्दीलेखन	Yes	2	T	46-48
16.	SEC-51T-116-Pest Management and Control	No	2	T+P	49-51
17.	SEC-51T-117-Vermicomposting	No	2	T+P	52-54
18.	SEC-51T-118-Understanding Union Budget and Economic Survey	Yes	2	T	55-57
19.	SEC-51T-119-Survey Methodology	Yes	2	T	58-59
20.	SEC-51T-120-Disaster Management	Yes	2	T	60-62

20. SEC-511-120-Disas

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SEMESTER-1

SEC-51P-103 – Data Analysis Using Excel

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-103	Data Analysis Using Excel		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	-	2	No	60 Hours Practical
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – <ol style="list-style-type: none"> 1. To Understand Data Analysis Fundamentals and Excel Basics: 2. Understanding the process of cleaning and transforming data. 3. Understanding Visualization of data. 4. Understanding Inbuilt functions of MS Excel and User defined functions 5. To understand Statistical Tools for Data analysis. 6. Apply Data Analysis to Real-world Scenarios. 				

Examination Scheme-

Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (CA + EoSE)	Minimum Marks (CA + EoSE)
Practical	SEC-51P-103-Data Analysis Using Excel	1 Hrs-CA 1 Hrs-EoSE	10 Marks-CA 40 Marks-EoSE	4 Marks-CA 16 Marks-EoSE

The Practical examination Scheme for **Data Analysis Using Excel** should be as follows –

- Three Practical Exercises of 10 Marks each from each Unit – 30 Marks
- Viva-Voce – 5 Marks
- Record – 5 Marks

The duration of the Practical Examination will be 1 Hour.

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SEMESTER-1

Detailed Syllabus

SEC-51P-103 – Data Analysis Using Excel

Unit-I

Introduction: Introduction to data analysis concepts. Excel's interface and its features. Data entry, formatting, and basic calculations on the worksheet. Introduction to Simple Excel functions (SUM, AVERAGE, COUNT, date formats etc.). Various forms of storing an Excel file. Managing worksheets and workbooks. Storing Workbooks.

(16Hours Practical)

Unit-II

Data Cleaning and Transformation Importing data from various sources (CSV, text, databases). Data cleaning techniques (removing duplicates, handling missing values). Text-to-columns and data splitting. Data validation and conditional formatting.

(12Hours Practical)

Unit-III

Visualization: Creating basic charts (bar, line, pie). Customizing charts (titles, labels, legends). Using advanced chart types (scatter plots, histograms). Adding trend lines and data labels. Creating dynamic charts with slicers. Probability Distributions and their graphical representation. Pivot Tables: Creating, modifying, and summarizing data. Pivot Charts: Visualizing Pivot Table data. Introduction to What-If Analysis

(16Hours Practical)

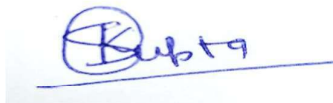
Unit-IV

Data Analysis Tools: Introduction to basic statistical functions (STDEV, MIN, MAX). Using Excel's built-in analysis tools (Correlation, Regression). Introduction to Power Query for data transformation. User Defined Formulae, Data Analysis Tool-Pack, Preparation of Correlation Matrix, Fitting multiple Regression equation. Generating Random Numbers, Statistical Inference tools: Application of Z-Test, t-test, F-tests, ANOVA- One way and Two-way.

(16Hours Practical)

Suggested Books and References –

1. Paul McFedries (2022): Excel Data Analysis For Dummies, 5th Edition, John Wiley & Sons, ISBN: 978-1-119-84442-6
2. K. Berk (Author), Partrick Carey (2003), Data Analysis with Microsoft Excel, Duxbury Press; New edition (25 March 2003), ISBN-13 : 978-0534407148



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3. Robert de Levie(2003), Advanced Excel for Scientific Data Analysis, OUP USA (9 October 2003), ISBN-13 : 978-0195170894
4. Manisha Nigam(2019): Data Analysis with Excel, BPB Publications; First Edition (5 September 2019),ISBN-13 : 978-9388176675
5. L. Winston Wayne(2019): MICROSOFT EXCEL 2019: DATA ANALYSIS & BUSINESS MODEL, 6thEdn., PHI Learning Pvt. Ltd. (11 October 2019),ISBN-13 : 978-9389347180
6. Wayne Winston(2017), Microsoft Excel Data Analysis and Business Modeling, Microsoft Press; 5th edition,ISBN-13 : 978-1509304219

Suggested E-resources:

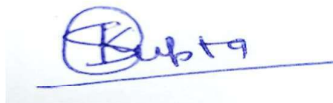
Online Lecture Notes and Course Materials:

1. E-PG Pathshala:
<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=fBYckQKJvP3a/8Vd3L08tQ==>
2. **Lecture Notes:**
 1. <https://www.gacbe.ac.in/pdf/ematerial/18BCS5EL-U5.pdf>
 2. <https://drive.google.com/file/d/11yrw1jBoI2RRaBIj4Vy3XpZQhaM8D1dz/view?pli=1>
 3. <https://www.guru99.com/excel-tutorials.html>
 4. <https://gacbe.ac.in/pdf/ematerial/18MEC24C-U4.pdf>

Course Learning Outcomes:

After completing this short-term course students will gain with

1. Proficiency in Excel.
2. Data Analytical tools with Excel.
3. Data Visualization tools with MS-Excel:
4. Creating Pivot-Table Mastery.
5. Participants will have a solid foundation for further studies in data analysis, statistics, or related fields.
6. Successful completion of the course can enhance participants' career prospects by equipping them with sought-after data analysis skills.
7. Participants will be better equipped to solve real-world problems using data-driven insights and informed decision-making.
8. Students will realize confident navigating and utilizing Excel for various data analysis tasks.




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