

**(Abstract)**

FYUG- Development Economics Programme -Modified Syllabus for the Skill Enhancement Course (SEC) "Data Analysis with Spreadsheet" in the Fourth Semester - Approved & Implemented w.e.f 2024 Admission - Orders issued

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**ACADEMIC C SECTION**

ACAD C/ACAD C4/22156/2024

Dated: 03.01.2026

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Read:-1. U.O No.ACAD C/ACAD C4/22156/2024 dated.28.03.2025 and 02.07.2025  
2. Minutes of the meeting of Board of Studies in Economics (UG) ,held on 12.10.2025.  
3. E-mail dtd. 20.11.2025 from the Chairperson, Board of Studies in Economics (UG).  
4. Minutes of the meeting of the standing committee of the Academic council held on 05.12.2025  
5. Orders of the Vice Chancellor dtd. 24.12.2025 in file No.ACAD C/ACAD C4/22323/2024

**ORDER**

1.The Scheme and Syllabus (First to Fourth Semesters only) of the Development Economics Programme under FYUGP pattern was approved and implemented in the affiliated colleges vide paper read (1) above.

2.Further, the Board of Studies in Economics (UG), in its meeting held on 12.10.2025 recommended **a modification in the existing credit distribution of the SEC course "Data Analysis with Spreadsheet"** offered in the Fourth Semester of the Development Economics Programme.

3.The syllabus of the SEC course and minutes of the meeting submitted by the Chairperson via email dated 20.11.2025. were forwarded to the Dean, Faculty of Humanities, for consideration. After vetting the syllabus the Dean recommended its approval, via email dated 02.12.2025.

4.The Vice-Chancellor, after examining the matter in detail, ordered to place modified syllabus of the SEC course **Data Analysis with Spreadsheet** (Fourth Semester), along with the minutes and the remarks of the Dean before the Standing Committee of the Academic Council for consideration

5.The Standing Committee of the Academic council, at its meeting held on 05.12.2025 considered the modified syllabus of the above SEC course in the Fourth Semester of the FYUG Development Economics Programme and recommended to approve the same.

6.The Vice Chancellor after considering the recommendation of the Standing Committee of the





Academic Council and in exercise of the powers of the Academic Council conferred under the Section 11 (1) chapter III of Kannur University Act 1996 and all other enabling provisions read together with **approved the modified syllabus of the SEC course "Data Analysis with Spreadsheet " in the Fourth Semester of the Development Economics (FYUG) programme, and accorded sanction to implement the same w.e.f 2024 admission in the Affiliated Colleges under the University, subject to reporting to the Academic Council.**

7.The modified syllabus of the SEC course "**Data Analysis with Spreadsheet** "in the Fourth Semester of the Development Economics -FYUG Programme is appended with this U.O. and uploaded in the University website ([www.kannuruniversity.ac.in](http://www.kannuruniversity.ac.in)).

Orders are issued accordingly.

Sd/-

**Jisha K P**

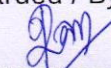
**Assistant Registrar II**

For REGISTRAR

To: 1.The Controller of Examinations( through the PA )  
2.The Principals of Arts and Science Colleges affiliated to Kannur University  
3.The Chairperson, Board of Studies in Economics(UG)

Copy To: 1. PS to VC / PA to PVC / PA to R/PA to FO/PA to CE (to circulate among the section concerned)  
2. DR / AR (Acad) / AR II Exam/JR II Exam  
3. Computer Programmer/EXC I/AR VII (Exam)  
4. Web Manager (for uploading in the website)  
5. SF/DF/FC

Forwarded / By Order

  
SECTION OFFICER





### KU4SECDEC201: DATA ANALYSIS WITH SPREADSHEET

Semester	Course Type	Course Level	Course Code		Credits	Total Hours
IV	SEC	200-299	KU4SECDEC201		3	90
Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
0	6	0	30	45	75	1.5 Hrs

#### Course Description:

*This course provides essential Excel skills tailored for economic data analysis. Students learn data import, manipulation, advanced formulas, and visualization techniques. Through practical projects on real economic issues, students gain hands-on experience and develop critical thinking skills. The course also emphasizes data ethics, ensuring students are equipped for responsible data-driven decision-making in economic contexts.*

#### Course Prerequisite: NIL

#### Course Outcomes:

At the end of the course, the student will be able to,

COs	Expected Outcome	Learning Domains
1	Confidently import, clean, and organize economic data in Excel spreadsheets.	R, U, A
2	Apply relevant formulas and functions to analyse and summarize data, drawing relevant economic conclusions.	R, U, A
3	Create various data visualizations (charts, graphs, etc.) to effectively communicate their findings to different audiences.	U, A, C
4	Gain familiarity with advanced Excel techniques for more complex data analysis tasks encountered in economic research.	R, U, A
5	Demonstrate an understanding of data ethics and responsible data-driven decision making in the economic context.	A, C

**\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

#### Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓		✓				
CO 2	✓			✓			
CO 3		✓			✓		
CO 4		✓			✓		
CO 5		✓			✓		

#### COURSE CONTENTS

#### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>EXCEL FOUNDATIONS AND DATA IMPORT</b>		<b>20</b>
	1	Launching Excel, navigating the interface, basic operations.	
	2	Importing data from different sources (CSV, text files, web), creating and managing tables. Applying data validation to ensure data accuracy and consistency.	
	3	Exploring the Ribbon and menus, customizing your Excel environment.	
	4	Learning basic file management: saving, sharing, and version control.	
	5	Practicing working with multiple worksheets and workbooks in your data analysis.	
<b>2</b>	<b>DATA MANIPULATION AND FORMULAS</b>		<b>20</b>
	1	Sorting and filtering data based on various criteria for efficient analysis.	
	2	Mastering basic formulas and functions: sum, average, count, max, min, etc.	
	3	Using logical functions (if, and, or) for conditional calculations and data segmentation	
	3	Applying lookup functions (VLOOKUP, MATCH) to integrate data from different sources.	
	4	Exploring advanced functions like SUMIF, AVERAGEIF, COUNTIF for targeted calculations.	
	5	Creating and using names for ranges and cells in excel	
<b>3</b>	<b>DATA VISUALIZATION AND ANALYSIS</b>		<b>20</b>
	1	Creating different chart types (bar, line, pie, scatter) based on your data.	
	2	Customizing charts for visual impact: titles, labels, legends, data labels, formatting.	
	3	Data visualization and interpretation of charts.	
	4	Descriptive statistics (mean, median, standard deviation, variance): calculation and interpretation.	
<b>4</b>	<b>ESSENTIAL DESCRIPTIVE STATISTICS IN EXCEL</b>		<b>17</b>
	1	Measures of Central Tendency:	
		a) In-depth exploration of mean, median, mode, and weighted averages	
		b) Calculation and interpretation of percentiles and quartiles for understanding data distribution	
	2	Measures of Variability:	
		a) Variance and standard deviation: mastering calculations and Interpretations.	
		b) Range, inter-quartile range, and coefficient of variation for understanding data spread.	
		c)Introduction to skewness and kurtosis for assessing data symmetry	
	3	Advanced Data Analysis Functions	

	a) Mastery of VAR.P, STDEV.P, SKEW, KURT, and other descriptive statistics functions b) Correlation analysis using Pearson's correlation coefficient and scatter plots	
	<b>TEACHER SPECIFIC MODULE</b>	<b>13</b>
	<i>Directions: Activity Based on Excel</i>	-
<b>5</b>	<ul style="list-style-type: none"> <li>● Choosing an actual economic issue relevant to India (e.g., inflation, trade, poverty).</li> <li>● Accessing and exploring relevant economic datasets from Indian or international sources.</li> <li>● Applying your learned skills to analyze the chosen economic issue using Excel.</li> <li>● Creating visualizations and descriptive statistics to support your analysis of the economic issue.</li> <li>● Preparing a final project report summarizing your findings and economic insights.</li> <li>● Class Presentations: Sharing your projects, receiving feedback, and engaging in discussions on real-world data analysis applications.</li> </ul>	

#### Essential Readings:

1. Frye, C. (2019). Microsoft Excel 2019 step by step. Pearson Education.
2. Jelen, B., Nash, T., Jones, K., & Urtis, T. (2018). Don't fear the spreadsheet: A beginner's guide to overcoming Excel's frustrations. Holy Macro! Books.
3. Narayana, D., Ranjan, S., & Tyagi, N. (2021). Basic computational techniques for data analysis: An exploration in MS Excel (2nd ed.). PHI Learning Pvt. Ltd.
4. Winston, W. L. (2019). Microsoft Excel 2019: Data analysis and business modeling. PHI Learning Pvt. Ltd.

#### Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1-5	Essential Readings 1 - 4	
2	1-5	Essential Readings 1 - 4	
3	1-4	Essential Readings 1 - 4	--
4	1-3	Essential Readings 1 - 4	

#### Assessment Rubrics:

Evaluation Type		MARKS
End Semester Evaluation-Theory		-
End Semester Evaluation – Practical		45
<b>End Semester Evaluation – Total</b>		<b>45</b>
Continuous Evaluation – Practical		30
a)	Test Paper-/ Practical	5
b)	Test Paper-2 /Practical	5-
c)	Assignment	-
d)	Seminar	-
e)	Book/ Article Review	-
f)	Viva-Voce	-5
Data Interpretation/Report		15
<b>Grand Total</b>		<b>75</b>