



# Module 9: Using ChatGPT with Excel



## What is ChatGPT?

**ChatGPT** is an AI assistant developed by OpenAI. It can understand natural language and help you with:

- 💡 Solving Excel formulas
- 🛠 Writing Macros (VBA code)
- 📊 Explaining functions or Excel errors
- 📖 Learning Excel step-by-step
- ⚡ Automating repetitive tasks



## How to Use ChatGPT for Excel

### ◆ Step-by-step:

1. **Go to:** <https://chat.openai.com>
2. **Login or Sign up**
3. **Start typing your question or task**  
✨ Write a clear and detailed prompt explaining what you need.



## Examples of Using ChatGPT in Excel



### Example 1: You Don't Know the Formula



#### Dataset:

Name	English	Maths
A	85	90



#### Prompt:

"I have marks in columns B and C. I want to calculate the average marks in column D. What formula should I use?"



ChatGPT will respond with:

=AVERAGE(B2, C2)

## Example 2: Conditional Formula

 Prompt:

"I want to assign grades in Excel: 'A' if marks > 90, 'B' if > 75, otherwise 'C'. What's the formula?"

 ChatGPT will provide:

```
=IF(A2>90,"A",IF(A2>75,"B","C"))
```

---

## Example 3: Lookup Function Help

 Prompt:

"In Sheet1, I have Employee IDs in column A and Departments in column B. In Sheet2, I want to look up the department by ID. Which formula should I use?"

 ChatGPT will provide:

```
=VLOOKUP(A2, Sheet1!A:B, 2, FALSE)
```

You can also ask:

- "Difference between `VLOOKUP` and `XLOOKUP`?"
- "How do I use `INDEX` and `MATCH` together?"

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## Macros and ChatGPT

### What is a Macro?

A **macro** is a recorded or coded set of steps that automates tasks in Excel.

You'll learn full details in **Module 10**.

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### How ChatGPT Helps with Macros

You can ask ChatGPT to:


- Write custom macro code (VBA)
  - Explain what each line of code does
  - Help with macro errors or editing code
  - Add buttons to run macros
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## Macro Examples with ChatGPT


### Example 1: Highlight Scores Above 90

 Prompt:

"Write a macro to highlight all numbers above 90 in yellow in the selected cells."

 ChatGPT responds with:

```
vba
CopyEdit
Sub HighlightTopScores()
    Dim cell As Range
    For Each cell In Selection
        If IsNumeric(cell.Value) And cell.Value > 90 Then
            cell.Interior.Color = RGB(255, 255, 0)
        End If
    Next cell
End Sub
```

 Use: Select your data, then run this macro to highlight cells.

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### Example 2: Save Sheet1 as a PDF

 Objective:

Automatically save **Sheet1** as a **PDF** in the same folder as your Excel file using a macro.

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## Step-by-Step: Using VBA to Create This Macro

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### Step 1: Open the Developer Tab

If not visible:

1. Right-click on the ribbon → Click **Customise the Ribbon**
  2. On the right pane, **check "Developer"** → Click **OK**
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### Step 2: Open the VBA Editor

1. Click on the **Developer** tab
  2. Click **Visual Basic**
- (Or press **Alt + F11**)
- 

### Step 3: Insert a New Module

1. In the VBA window, go to **Insert → Module**
  2. A blank code window will appear
-

## ◆ Step 4: Paste the VBA Code

… Prompt:

"Write a macro to save Sheet1 as a PDF in the same folder as the Excel file."

✓ ChatGPT gives:

vba

CopyEdit

```
Sub SaveSheet1AsPDF()
```

```
    Dim ws As Worksheet
```

```
    Set ws = ThisWorkbook.Sheets("Sheet1")
```

```
    Dim filePath As String
```

```
    filePath = ThisWorkbook.Path & "\" & ws.Name & ".pdf"
```

```
    ws.ExportAsFixedFormat Type:=xlTypePDF, Filename:=filePath
```

```
End Sub
```

📌 Just run the macro—Sheet1 will be saved as a PDF in your workbook folder.

## ◆ Step 5: Run the Macro

1. Close the VBA Editor ( **Alt + Q** )
2. Go back to Excel
3. On the **Developer tab**, click **Macros**
4. Select **SaveSheet1AsPDF** → Click **Run**

✓ Sheet 1 will be saved as a **PDF** in the same location as your Excel file.

## 📁 Don't Forget: Save Your File Properly!

- Go to **File → Save As**
- Choose **Excel Macro-Enabled Workbook**
- Save with the extension: **.xlsm**

## 💡 Tips:

- Make sure your workbook is saved first (so **ThisWorkbook.Path** works correctly)
- Sheet 1 should contain printable data
- You can customise the filename or path inside the code if needed






… Prompt:

"Write a macro to save Sheet1 as a PDF in the same folder as the Excel file."

## Best Practices for Asking ChatGPT

Tip	Why it Helps
Be specific	Helps ChatGPT give accurate code
Mention column/row locations	E.g., "Data is in columns A to C"
Say what Excel version you use	Some features differ in older versions
Describe the goal	Explain what result you want

### Quick Tips

-  Use ChatGPT to build **custom formulas**
-  Ask for formula explanations if you're confused
-  Use it as a **personal Excel tutor**
-  Take help with writing and understanding **VBA macros**
-  Save macro-enabled files as `.xlsm` (Excel Macro-Enabled Workbook)