

Here is a one-hour lecture topic on using Excel to calculate employee retirement duration, along with examples:

**Lecture Topic:** Calculating Employee Retirement Duration in Excel

**Duration:** 1 hour

**Objective:** By the end of this lecture, students will be able to understand and apply the formulas and functions in Excel to calculate employee retirement duration.

### **Calculating Employee Retirement Duration:**

To calculate employee retirement duration, we need to know the employee's birthdate, hire date, and retirement age. We can use the following formulas and functions in Excel to calculate the retirement duration:

#### **1. Calculating Age**

**Syntax:** `YEAR(TODAY()) - YEAR(birthdate)`

**Example:** `=YEAR(TODAY()) - YEAR(A2)`

**Description:** This formula calculates the employee's current age.

#### **2. Calculating Years of Service**

**Syntax:** `YEAR(TODAY()) - YEAR(hire_date)`

**Example:** `=YEAR(TODAY()) - YEAR(B2)`

**Description:** This formula calculates the employee's years of service.

#### **3. Calculating Retirement Date**

**Syntax:** `EDATE(hire_date, (retirement_age - age) * 12)`

**Example:** `=EDATE(B2, (65 - (YEAR(TODAY()) - YEAR(A2))) * 12)`

**Description:** This formula calculates the employee's retirement date based on their hire date, age, and retirement age.

#### 4. Calculating Retirement Duration

**Syntax:** `DATEDIF(retirement_date, TODAY(), "Y")`

**Example:** `=DATEDIF(C2, TODAY(), "Y")`

**Description:** This formula calculates the employee's retirement duration in years.

#### Examples and Exercises:

- Calculate the age of an employee born on January 1, 1980, using the `YEAR(TODAY()) - YEAR(birthdate)` formula.
- Calculate the years of service of an employee hired on January 1, 2010, using the `YEAR(TODAY()) - YEAR(hire_date)` formula.
- Calculate the retirement date of an employee born on January 1, 1980, hired on January 1, 2010, and retiring at age 65, using the `EDATE(hire_date, (retirement_age - age) * 12)` formula.
- Calculate the retirement duration of an employee born on January 1, 1980, hired on January 1, 2010, and retiring at age 65, using the `DATEDIF(retirement_date, TODAY(), "Y")` formula.

#### Conclusion:

In this lecture, we covered the formulas and functions in Excel to calculate employee retirement duration, including calculating age, years of service, retirement date, and retirement duration.

We also provided examples and exercises to help students understand and apply these formulas in real-world scenarios.

And here is the translation to Arabic:

حساب فترة التقاعد للموظفين في إكسل: **عنوان المحاضرة**

ساعة واحدة: **مدة المحاضرة**

بعد نهاية هذه المحاضرة، سيكون الطلاب قادرين على فهم: **هدف المحاضرة**  
وتطبيق الصيغ والدوال في إكسل لحساب فترة التقاعد للموظفين

**حساب فترة التقاعد للموظفين**

لحساب فترة التقاعد للموظفين، نحتاج إلى معرفة تاريخ الميلاد وتاريخ التوظيف  
وعمر التقاعد. يمكننا استخدام الصيغ والدوال التالية في إكسل لحساب فترة التقاعد

1. **حساب العمر**

**yntax:** YEAR(TODAY()) - YEAR(tarih\_milad)

**مثال:** =YEAR(TODAY()) - YEAR(A2)

هذه الصيغة تحسب عمر الموظف الحالي: **وصف**

2. **حساب سنوات الخدمة**

**yntax:** YEAR(TODAY()) - YEAR(tarih\_touzi)

**مثال:** =YEAR(TODAY()) - YEAR(B2)

هذه الصيغة تحسب سنوات خدمة الموظف: **وصف**

3. **حساب تاريخ التقاعد**

**yntax:** EDATE(tarih\_touzi, (12 \* (عمر - تقاعد - 12 \* (YEAR(TODAY()) - YEAR(A2))))

**مثال:** =EDATE(B2, (65 - (YEAR(TODAY()) - YEAR(A2))) \* 12)

**وصف:** هذه الصيغة تحسب تاريخ التقاعد للموظف بناءً على تاريخ التوظيف وعمره وعمر التقاعد.

4. حساب فترة التقاعد

**yntax:** DATEDIF(tarih\_taqaed, TODAY(), "Y")

**مثال:** =DATEDIF(C2, TODAY(), "Y")

**وصف:** هذه الصيغة تحسب فترة التق

- YEAR:

C6

X

✓

fx

=YEAR(B6)

	A	B	C	D	E	F	G
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

YEAR (date)

Extract year number from date

Date	Result
10-Oct-1964	1964
17-May-1970	1970
30-Nov-1981	1981
15-Feb-1987	1987
30-Mar-1998	1998
20-Sep-2000	2000
30-Mar-2012	2012
24-Jun-2019	2019

EXCELJET

- EDATE:

E5

X

✓

fx

=EDATE(B5,C5)

	A	B	C	D	E	F	G	H	I	J	
1											
2	EDATE function										
3											
4		Start	Months		Result						
5		1-Feb-2024	1		1-Mar-2024	// one month later					
6		1-Feb-2024	2		1-Apr-2024	// two months later					
7		1-Feb-2024	3		1-May-2024	// three months later					
8		1-Feb-2024	-1		1-Jan-2024	// one month earlier					
9		1-Feb-2024	-2		1-Dec-2023	// two months earlier					
10		1-Feb-2024	-3		1-Nov-2023	// three months earlier					
11		31-Jan-2024	1		29-Feb-2024	// end of month adjustment					
12		15-Mar-2024	1.5		15-Apr-2024	// ignores decimal values					
13		15-Mar-2024	12		15-Mar-2025	// one year later					
14		15-Mar-2024	24		15-Mar-2026	// two years later					
15		1-Jun-2024	120		1-Jun-2034	// 10 years later					
16		15-Sep-2024	-60		15-Sep-2019	// 5 years earlier					
17											

EXCELJET

## - DATEIF:

E5		: X ✓ fx		=DATEDIF(B5,C5,"y")	
	A	B	C	D	E
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

  

DATEDIF function				
Start date	End date	Unit	Result	
1-Jan-2022	1-Mar-2024	y	2	// difference in complete years
1-Jan-2022	1-Mar-2024	m	26	// difference in complete months
1-Jan-2022	1-Mar-2024	d	790	// difference in days
1-Jan-2022	1-Mar-2024	md	0	// difference in days, ignoring months and years
1-Jan-2022	1-Mar-2024	ym	2	// difference in months, ignoring days and years
1-Jan-2022	1-Mar-2024	yd	59	// difference in days, ignoring years