



Ministry of cooperatives
Labour and Social Welfare



Iran Technical and Vocational
Training Organization

Deputy of training
Plan and curriculums office

Competency Training standard

Title

Microsoft Excel2016

Occupational group

INFORMATION TECHNOLOGY (IT)

International code

2519-53-102-1

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Revision Process:

- Scientific content
- According to market
- Equipment
- Tools

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Definitions:

Job standard:

The characteristics ' required competencies and abilities for Efficient Performance in work environment is called "the Job standard", and sometimes "The Occupational standard"

Training standard:

The Training Map for achieving the Job's subset Competencies.

Job title:

Is a set of Tasks and Abilities which is expected from an employed person in the defined level

Job description:

A statement covering the most important elements of a job, namely the position or title of the job, the duties, job's relation with other jobs in a occupational field, the responsibilities, workplace conditions and required performance standards.

Course duration:

The minimum of time which is required to achieve the training objects.

Admission requirements:

The minimum of competencies and abilities which are obligatory for a potential admission.

Evaluation:

The process of collecting evidence and judgment about whether a competency is achieved or not.

Include: written examination, practical examination

Required Qualifications for Trainers:

The minimum of Trainer's technical and vocational abilities which the trainer is required to have.

Competency:

The ability of efficient performing a duty in a variety of workplaces conditions

Knowledge:

The minimum set of facts and mental capacities which is necessary for achieving a competency. This can include science, (Mathematics, physics, chemistry or biology), technology or technical.

Skill:

The minimum coordination between mind and body for achieving an ability or competency. It normally applied to practical skills.

Attitude:

A set of emotional behaviors required for achieving a competency and can have non-technical skills and occupational ethics.

Safety:

The cases which doing or not doing something can cause harm or accident

Environmental Consideration:

A set of consideration about the act which should be done to minimize the environmental damage or pollution.

Competency Title:

Microsoft Excel2016

Competency Description:

Microsoft Excel is a spreadsheet developed by Microsoft for Windows, Mac OS X, and iOS. It features calculation, graphing tools, pivot tables, and a macro programming language called Visual Basic for Applications. It has been a very widely applied spreadsheet for these platforms, especially since version 5 in 1993, and it has replaced Lotus 1-2-3 as the industry standard for spreadsheets

Admission Requirements:

minimum degree of education: Post first year of high school

minimum physical and mental ability:-

Prerequisite skills:

Course duration:

Course duration: 60 hours

-Theoretical :20 Hours

-Practical :40 Hours

-Apprenticeship:... Hours

-Project:... Hours

Evaluation :(%)

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IRANTVTO Evaluation :(%)

Written Examination:25%

Practical Examination:65%

Ethics:10%

Required Qualifications for Trainers:

Computer engineer with 3 years experience

Competency Training Standard

Competencies

	Title
1	Creating a Microsoft Excel Workbook
2	The Ribbon
3	The Backstage View (The File Menu)
4	The Quick Access Toolbar
5	Entering Data in Microsoft Excel Worksheets
6	Formatting Microsoft Excel Worksheets
7	Using Formulas in Microsoft Excel
8	Working with Rows and Columns
9	<input type="checkbox"/> Advanced Formulas
10	Working with Lists
11	Working with Illustrations
12	Visualizing Your Data
13	Working with Tables
14	Advanced Formatting
15	Editing Worksheets
16	Finalizing Microsoft Excel Worksheets
17	Features New in 2016

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Training standard
Contents analysis form

Title: Creating a Microsoft Excel Workbook	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration			Equipments ,tools, materials ,books	
Knowledge and Skill: <ul style="list-style-type: none"> • Starting Microsoft Excel • Creating a Workbook • Saving a Workbook • The Status Bar • Adding and Deleting Worksheets • Copying and Moving Worksheets • Changing the Order of Worksheets • Splitting the Worksheet Window • Closing a Workbook 	Determined by the instructor			From Microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: The Ribbon	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Tabs • Groups • Commands 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
 Contents analysis form

Title: The Backstage View (The File Menu)	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Introduction to the Backstage View • Opening a Workbook • New Workbooks and Excel Templates • Printing Worksheets • Adding Your Name to Microsoft Excel • Managing Workbook Versions 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: The Quick Access Toolbar	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Adding Common Commands • Adding Additional Commands with the Customize Dialog Box • Adding Ribbon Commands or Groups • Placement 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Entering Data in Microsoft Excel Worksheets	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Entering Text • Expand Data across Columns • Adding and Deleting Cells • Adding an Outline • Adding a Hyperlink • Add WordArt to a Worksheet • Using AutoComplete • Entering Numbers and Dates • Using the Fill Handle 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Formatting Microsoft Excel Worksheets	time			Equipments ,tools, materials ,books
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				
Knowledge and Skill: <ul style="list-style-type: none"> • Selecting Ranges of Cells • Hiding Worksheets • Adding Color to Worksheet Tabs • Adding Themes to Workbooks • Adding a Watermark • The Font Group • The Alignment Group • The Number Group 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Equipment & Tools & Materials & Resources (books, site, software...) form

*Required quantity for each 16 Trainees

From: Microsoft

Training standard

Contents analysis form

Title: Using Formulas in Microsoft Excel	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Math Operators and the Order of Operations • Entering Formulas • AutoSum (and Other Common Auto-Formulas) • Copying Formulas and Functions <ul style="list-style-type: none"> ○ Displaying Formulas • Relative, Absolute, and Mixed Cell References 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
 Contents analysis form

Title: Working with Rows and Columns	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Inserting Rows and Columns • Deleting Rows and Columns • Transposing Rows and Columns • Setting Row Height and Column Width • Hiding and Unhiding Rows and Columns • Freezing Panes 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Advanced Formulas	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Using Named Ranges in Formulas <ul style="list-style-type: none"> ▪ Naming a Single Cell ▪ Naming a Range of Cells ▪ Naming Multiple Single Cells Quickly • Using Formulas That Span Multiple Worksheets • Using the IF Function <ul style="list-style-type: none"> ▪ Using AND/OR Functions ▪ Using the SUMIF, AVERAGEIF, and COUNTIF Functions • Using the PMT Function • Using the LOOKUP Function • Using the VLOOKUP Function • Using the HLOOKUP Function • Using the CONCATENATE Function • Using the TRANSPOSE Function • Using the PROPER, UPPER, and LOWER Functions <ul style="list-style-type: none"> ▪ The UPPER Function ▪ The LOWER function 	Determined by the instructor			From microsoft

<ul style="list-style-type: none"> ▪ The TRIM Function • Using the LEFT, RIGHT, and MID Functions <ul style="list-style-type: none"> ▪ The MID Function • Using Date Functions <ul style="list-style-type: none"> ▪ Using the NOW and TODAY Functions • Creating Scenarios <ul style="list-style-type: none"> ▪ Utilize the Watch Window ▪ Consolidate Data ▪ Enable Iterative Calculations ▪ What-If Analyses ▪ Use the Scenario Manager ▪ Use Financial Functions 				
<p>Attitude: Speed and accuracy in doing the right thing</p>				
<p>Health & Safety: Compliance with safety protection in the workplace</p>				
<p>Environmental Consideration: Compliance with environmental protection</p>				

Training standard
Contents analysis form

Title: Working with Lists	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Converting a List to a Table • Removing Duplicates from a List • Sorting Data in a List • Filtering Data in a List • Adding Subtotals to a List <ul style="list-style-type: none"> ▪ Grouping and Ungrouping Data in a List 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Working with Illustrations	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Working with Clip Art • Using Shapes • Working with SmartArt 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Visualizing Your Data	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Creating a Custom Chart Template • Inserting Charts • Add and Format Objects • Insert a Text Box • Create a Custom Chart Template 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Working with Tables	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Format Data as a Table • Move between Tables and Ranges • Modify Tables <ul style="list-style-type: none"> ▪ Add and Remove Cells within a Table • Define Titles <ul style="list-style-type: none"> ▪ Band Rows and Columns ▪ Remove Styles from Tables 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Advanced Formatting	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Applying Conditional Formatting • Working with Styles <ul style="list-style-type: none"> ▪ Applying Styles to Tables ▪ Applying Styles to Cells • Creating and Modifying Templates <ul style="list-style-type: none"> ▪ Modify a Custom Template 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Editing Worksheets	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Find • Find and Replace • Using the Clipboard • Managing Comments <ul style="list-style-type: none"> ▪ Adding Comments ▪ Working with Comments 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title:	time			
	theoretical	practical	total	
	Finalizing Microsoft Excel Worksheets	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • Setting Margins • Setting Page Orientation • Setting the Print Area • Print Scaling (Fit Sheet on One Page) • Printing Headings on Each Page/Repeating Headers and Footers • Headers and Footers 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Features New in 2016	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> • New Charts <ul style="list-style-type: none"> ▪ Treemap ▪ Sunburst ▪ Histogram ▪ Waterfall ▪ Box and Whisker ▪ Pareto 	Determined by the instructor			From microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				