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# Cambridge College London

## The full syllabus of OMCS

## Types and components of computer systems: Duration: 2 Hours

- define hardware, giving examples
- define software, giving examples
- describe the difference between hardware and software
- identify the main components of a general-purpose computer: central processing unit, main/internal memory (including ROM and RAM), input devices, output devices and secondary/backing storage
- identify operating systems, including those which contain a graphical user interface, a command line interface
- identify different types of computer including Personal Computer or desktop, mainframe, laptop, palmtop and Personal Digital Assistant Identify the following input devices:
- Keyboards, numeric keypads, pointing devices (including mouse, touch pad and tracker ball), remote controls, joysticks, touch screens, magnetic stripe readers, chip readers, PIN pads, scanners, digital cameras, microphones.
- Identify the following output devices: monitors (CRT, TFT), projectors, printers (laser, ink jet and dot matrix), plotters, speakers.

## **Operating System (Management Files) :** Duration: 4 Hours.

- Working with computers
- Using startup and shutdown
- The desktop, Windows and programs
- Using my computer
- Using control panel
- Using Windows explorer
- Using accessories
- Searching for file/folder & saving files
- Using Help

## **MICROSOFT WORD: Duration 10 hours**

- Working with Templates:
- Creating Your Document with a Wizard
- Opening an Existing Template
- Modifying and Saving a Template
- Creating a Template
- Attaching a Template to a Document
- About Global Templates
- Practice Exercise Using Bullets and Numbering:
- Types of Lists
- Creating a Bulleted or Numbered List
- Modifying and Removing Bulleted or Numbered Lists
- Restarting or Continuing a Bulleted or Numbered List
- Using Outlined Lists
- Customizing Bullets and Numbers
- Practice Exercise Using Delineation Tools:
- Inserting a Section Break
- Inserting a Page Break
- Inserting a Line Break
- Using Page and Line Break Options
- Using Columns
- Practice Exercise Using Headers and Footers:
- Viewing Headers and Footers
- Creating or Deleting a Header or Footer
- Using the Header/Footer Toolbar
- Inserting Dynamic Text
- Inserting Page Numbers
- Applying Page Settings
- Header and Footer Links
- Practice Exercise Using Paragraph Tools:
- Viewing Document Markings
- Applying Borders
- Applying Shading and Patterns
- Applying Alignment and Indentation
- Applying Spacing
- Practice Exercise
- Customizing Your Documents:
- Applying Styles
- Using the Styles Task Pane
- Modifying a Style
- Creating a Style

- Creating a Character Style
- Deleting a Style
- Using Click and Type Styles Managing Styles:
- Organizing Your Styles
- Displaying Styles in a Document
- Revealing Formatting
- Using AutoFormat as You Type
- Using AutoFormat Using Language Tools:
- Using and Customizing AutoCorrect
- Using the Research Pane
- Using the Thesaurus
- Translating a Document
- AutoSummarize Your Document Inserting Pre-Defined Text:
- Inserting AutoText
- Customizing AutoText
- Inserting the Date and Time
- Inserting a Symbol
- Inserting Special Characters Using Timesaving Tools:
- Using the Format Painter
- Using Themes
- Using Smart Tags
- Working with Graphics
- Inserting a Picture from a File
- Using the Picture Toolbar
- Formatting a Picture
- Adding Captions
- Practice Exercise
- Using Pre-Defined Graphics
- Using WordArt
- Using Watermarks
- Inserting ClipArt
- Using the Online Gallery
- Practice Exercise
- Inserting Diagrams and Charts
- Using an Organization Chart
- Inserting a Cycle Diagram
- Using a Radial Chart
- Inserting a Pyramid Diagram
- Inserting a Venn Diagram
- Inserting a Target Diagram
- Customizing Graphics
- Using the Drawing Toolbar

- Creating a Drawing
- Inserting AutoShapes
- Editing AutoShapes
- Using 3-D Styles and Shadows
- Inserting and Using Text Boxes
- Practice Exercise
- Using Objects
- Inserting an Object
- Selecting, Moving, and Resizing Objects
- Object Groups
- Arranging Objects
- Practice Exercise
- Creating and Editing Tables
- Inserting a Table
- Drawing a Table
- Selecting Cells, Rows and Columns
- Inserting and Deleting Cells, Rows and Columns
- Merging and Splitting Cells, Columns, or Rows
- Resizing Cells, Columns, or Rows
- Selecting a Table
- Moving and Resizing a Table
- Practice Exercise
- Applying Basic Formatting
- Aligning a Table
- Changing Table Spacing
- Changing Text Direction
- Practice Exercise
- Applying Advanced Formatting
- Using AutoFit
- Using the Borders and Shading Dialog
- Using the Tables and Borders Toolbar to Modify Borders and Shading
- Using AutoFormat
- Practice Exercise

## **MICROSOFT EXECL:** Duration 10 hours

- Formatting Cells Using Menu Options
- How To Double Underline Using Menu Option
- How To Align Vertically
- How To Change Text Orientation
- How To Wrap Text In A Cell
- How To Format Numbers
- How To Format Date
- How To Change Cell Background Color
- How To Add Outline Border

- How To Add Double Line Border
- How To Format Table Using AutoFormat

#### Working with advanced formatting, style and outlining:

- Customizing Data Appearance with Advance Formatting
- How To Use Build-In Number Formats
- How To Custom Number Format
- How To Custom Date Format
- Using Conditional Formatting
- How To Use Conditional Formatting

#### Maintaining Format Consistency with Styles:

- How To Add Style Box Tool To The Toolbar
- How To Create New Style
- How To Apply Styles
- How To Redefine Style
- How To Delete Style
- How To Merge Style From Another Workbook

#### **Using Data Outlining:**

- How To Create An Outline Automatically
- How To Remove Outline
- How To Create Outline Manually
- How To Use Subtotal To Create Outline
- How To Show / Hide Details Using Outline Symbols
- How To Remove Subtotal

#### Managing workbook information:

- How To Rename Worksheet
- How To Add New Worksheet
- How To Rearrange Worksheet
- How To Copy Worksheet
- How To Hide And Unhide Worksheet
- How To Hide And Unhide Workbook
- How To Format Worksheet Tab

#### Working with multiple worksheets and workbooks:

- How To Select Adjacent Worksheets
- How To Select Non-Adjacent Worksheets
- How To Enter Data Into Multiple Worksheets
- Using 3-D Formula Across Worksheets
- How To Enter 3-D Formula Across Worksheets
- How To Enter 3-D Formula Across Worksheets Using Function

#### Linking Information from Different Worksheets and Workbook:

- How To Link Information Using Copy And Paste Link
- How To Update Link

#### Formatting charts:

- How To Change Font Format
- How To Change Text Orientation
- How To Change Object Color
- How To Change The Order Of Data Series
- How To Use Combination Of Chart Type
- How To Create A Pie Chart
- How To Use 3-D View To Rotate Chart
- How To Explode A Wedge In Pie Chart
- How To Create A Picture Chart

#### Working with comments:

- How To Add A Comment Into A Cell
- How To Show Comments
- How To Show/Hide Comment Indicators
- How To Edit And Delete Comments

#### Protecting worksheet style, contents and element:

- How To Protect the Worksheet
- How To Unprotect The Worksheet
- How To Unlock Cell For Editing In Protected Sheet
- How To Hide Cell Formula In Protected Sheet
- How To Set Password To Edit Specific Range
- How To Grant Selected Users Edit Range Without Password

#### **Protecting Workbook Contents:**

- How To Protect The Workbook Structure
- How To Unprotect The Workbook Structure
- Protecting Your Workbook From Unauthorized Users Access
- How To Set Password To Open
- How To Remove Password To Open
- How To Set Password, Modify or Create Password **Sorting Records:**
- How To Perform Simple Sort
- How To Perform Multiple Sort
- How To Set Advanced Sort Options Using AutoFilter:
- How To Enable / Disable AutoFilter
- How To Apply / Remove The Criteria
- How To Customize Criteria
- How To Use Wildcard In Criteria Using Advance Filter

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• How To Define The Criteria Range

• How to Use the Advanced Filter Command

#### Spreadsheet design

- Identify the data to be output from a spreadsheet and the format of output from a description of a typical application.
- Identify the data to be input to a spreadsheet from a description of a typical application.
- Identify the data processing (calculating) required in a spreadsheet from a description of a typical application.
- Design and create data capture forms.
- From a description of a typical spreadsheet application, create a design specification including details of: data input and format; data processing; data output and format.
- Plan a spreadsheet structure to meet a given specification.

#### Spreadsheet creation:

- Create a spreadsheet to meet the requirements of a design specification.
- Select and use appropriate column widths.
- Create and enter appropriate and meaningful titles and headings.
- Use screen borders and windows to ease data entry.
- Select and use suitable cell formats and alignment for given data types to provide an appropriate display.

Alignment: (left, centre, right, centre across selection)

• Name ranges of cells

#### Spreadsheet calculations

- Identify, select and use formulae to meet specified data processing requirements (calculations), including the use of named ranges.
- Select and use a range of functions to meet data processing requirements.

Functions: (sum, average, minimum, maximum, count, round & date)

• Create and use simple IF statements.

#### Security and user interface

- Plan which data needs protection and arrange unprotected data in one area.
- Protect and unprotect cells on a spreadsheet.
- Hide and display specific rows and columns in a spreadsheet.
- Use the facilities available to produce a spreadsheet that is attractive and easy to read.

#### Test and validate:

- Create test data to validate the input, processing and output requirements of a spreadsheet.
- Validate data independently of a spreadsheet using a dry run technique and separate calculations.
- Test a spreadsheet using test data.

#### Input and output printing

• Design appropriate layout for data output (report forms).

- Use an existing spreadsheet model (template) to insert data and produce required output.
- Import a spreadsheet file into another spreadsheet in a specified location.
- Extract part of an existing spreadsheet to create a separate file.
- Produce an abstract of spreadsheet data in the same spreadsheet file.
- Copy the values only of formulae from one part of a spreadsheet to another.
- Produce a print-out of a spreadsheet display using borders, headers and/or footers.
- Change the layout, margins and print size of a spreadsheet to produce an appropriate hard copy.
- Use named ranges to print part of a spreadsheet.
- Produce a print-out of the contents (formulae) of a spreadsheet.

#### User instructions

• Produce user instructions for a spreadsheet.

## Microsoft Access : Duration 8 Hours

- What a database is
- How tables, forms, and queries relate to a database
- What records and fields are
- Start Access
- The parts of the Access environment
- How Wizards can help you
- Get help when using Access
- Possible uses for both databases and Access
- Exit Access
- Create a database
- What to name your database and where to store it
- Create a table using the Table Wizard
- What types of tables you can create with the Table Wizard
- Pick a name for your table
- What a primary key is and choose one
- Enter information into your new table
- Close the Datasheet
- Change and delete information in the table
- When your information is *really* saved
- Change an existing table's structure
- The data types that Access supports
- Why you should add comments to your table design
- What field properties are and how you can change them
- Perform editing functions on entire tables

- Create a database
- Design your own table
- Layout your table using the Design view window
- Test your table layout
- What sorting is
- Perform a simple sort
- What a simple sort is
- Construct a complex sort
- Remove the effects of a sort
- What a filter is
- Filter your data
- Save a filter
- What queries are
- What types of queries Access lets you create
- How Access stores queries
- Use the Query Wizards
- Design your own queries
- Use the QBE grid
- Set properties in a query
- Print your table's contents
- Select a printer
- Specify the way in which your information should print
- Print an object's layout
- Use print preview to save paper
- What a report is
- Ways to create reports
- Start the Report Wizards
- The types of reports you can create with the Report Wizards
- Create a simple tabular report
- Create mailing labels
- What Access forms are and their benefits
- Ways you create forms
- How you start and use the Forms Wizards
- How you create forms from scratch
- How you use the form design toolbox
- How you can use the Access color palette within your forms
- Place objects on your form
- How properties apply to objects and forms
- Save your form within your database

- Use Access' built-in spell checker
- How the AutoCorrect feature can make inputting data faster
- Why analyzing a table may result in more efficient databases
- Use the Performance Analyzer tool
- Why you would want to use Access with Word and Excel
- Use the Microsoft Word Mail Merge Wizard
- Insert merge fields into a Word document
- Merge Access data with the Word document
- Output the contents of an entire table or query to Excel
- Output a portion of a table or query to Excel
- Establish an active link between Excel and Access
- What relationship there is between information that has been transferred and your original Access information
- What the Web is and how it works
- Use hyperlinks in your databases
- Create Web pages in Access
- Conduct a Net meeting
- What a relational database is
- How information in tables can be related
- Why keys are important in a relational environment
- Create a relationship between two tables
- What referential integrity means
- Display the report Design window
- How the report Design window relates to other Design windows
- What the different sections of a report are
- What report properties mean and how you use them
- Design each section of your report
- Group data in your report
- View your report as you design
- Save your report within your database
- What data importing is
- What types of files Access can import
- Import a file
- What data exporting is
- What types of files Access can export
- Export a database object

- Different levels of security you can use in Access
- Set a database password
- What it means to encrypt a database file
- Configure user-level security
- Work with accounts and permissions
- Use the User-Level Security Wizard
- What OLE is and how it works
- What types of objects you can use with Access
- Insert objects in your table
- Modify links between Access and other programs
- Edit objects you have linked to Access
- What macros are and how you can use them
- What actions and arguments are
- Create macros
- Use the Macro window
- What it means to create conditional macros
- How you can execute a macro
- Link a macro to a command button on a form
- Edit existing macros
- Use message boxes
- Design dialog boxes
- Create a switchboard menu
- Add custom menus to your forms and reports
- What Visual Basic for Applications is
- How Access uses procedures, functions, and subroutines
- The parts of a Visual Basic for Applications program
- Use statements, variables, operators, and functions within your program
- Address database objects in Visual Basic for Applications
- Use the VBA Editor
- Develop a Visual Basic for Applications procedure
- Test your procedures
- Use a procedure from an Access form
- Ong title
- CD name
- Track number
- Length
- Group
- Notes

## **Microsoft PowerPoint: 8 Hours**

- Creating a Presentation
- Using a Colour Scheme
- Creating a Presentation Using a Wizard
- Exploring and Moving around a Presentation
- Changing Text in the Outline Pane, Slide Pane
- Reversing one or more Actions
- Changing Presentation Views, Properties
- Previewing Slides and Saving Presentations
- Viewing and Choosing a Colour Scheme
- Changing Colours in a Colour Scheme
- Creating a New Scheme
- Adding New Colours to Colour Menus
- Adding a Background
- Copying a Colour Scheme
- Working with a Presentation
- Drawing and Modifying Objects
- Using the Design Template
- Entering Text into Slide/Outline/Notes Pane
- Creating a New Slide
- Editing in Normal View
- Entering Speakers' Notes
- Rearranging Slides in Slide Sorter View
- Showing Slides
- Drawing, Editing, Copying and Moving an Object
- Changing the Shape of an Object
- Modifying Object Attributes
- Aligning, Connecting Objects
- Adding 3-D Effects to Objects
- Changing, Rotating, Flipping Objects
- Grouping and Ungrouping Objects
- Printing a Presentation
- Inserting Information into PowerPoint
- Opening an Existing Presentation
- Previewing Slides in Black and White
- Adding a Header and a Footer
- Changing the Page Setup
- Choosing a Printer
- Printing Slides, Audience Handouts, Speaker Notes
- Inserting a Clip Art Image
- Scaling an Image
- Re-colouring a Clip Art Image

- Inserting and Formatting a Table
- Inserting a Graph, Excel, Organisational Chart
- Inserting and Modifying a Picture
- Outlining Your Ideas
- Producing a Slide Show
- Creating a Blank Presentation
- Viewing and Entering Text
- Inserting an Outline from MS Word
- Changing the View of an Outline
- Selecting, Rearranging, Slides, Paragraphs & Text
- Sending an Outline or Notes to Word
- Navigating in Slide Show View
- Annotating Slides During a Slide Show
- Setting Text Transitions
- Animating Slides
- Hiding a Slide during a Slide Show
- Creating and Editing a Custom Slide Show
- Adding and Modifying Text
- Creating a Multimedia Presentation
- Selecting and Deselecting Objects
- Adding and Formatting Text to Slides
- Adjusting the Position of Text Objects
- Changing Text Alignment and Spacing
- Checking Spelling, Presentation Styles
- Inserting Sound, Movies
- Setting Slide Timings
- Rehearsing Slide Timings
- Recording a Narration
- Using the Projector Wizard
- Applying and Modifying Templates
- Creating an Internet Presentation
- Understanding PowerPoint Masters
- Changing the Display using the Master
- Modifying Master Placeholders
- Formatting Master Text
- Reapplying a Slide Layout
- Hiding Master Objects
- Saving a Template
- Creating an Agenda Slide or Home Page
- Creating a Hyperlink to a Slide/Excel Chart/Web site
- Creating an Action Button
- Previewing a Presentation as a Web Page
- Saving and Publishing a Web Page as a Presentation
- Accessing the Internet from PowerPoint

- Presenting a Show on Two Monitors
- Reviewing and Sharing a Presentation
- Sending a Presentation
- Taking Notes during a Presentation
- Broadcasting a Presentation over a Network
- Using the PowerPoint Viewer
- Hosting and Participating in an Online Broadcast
- Using the Pack and Go Wizard
- Using Online Collaboration, Online Meeting
- Holding a Web Discussion

## Web browsing and communication Duration: 4 Hours

- describe a router and its purpose
- describe the use of WIFI and Bluetooth in networks
- describe how to set up a small network involving access to the internet, understanding the need to setup the use of a browser, email and an ISP
- identify the advantages and disadvantages of using common network environments such as the internet.
- describe what is meant by the terms user id and password.
- identify a variety of methods of communication such as fax, email.
- define the terms Local Area Network (LAN), Wireless Local Area Network and Wide Area Network (WAN).
- describe the difference between LANs, WLANs and WANs.
- describe the characteristics and purpose of common network environments, such as intranets and the internet.
- send and receive documents and other files electronically manage contact lists effectively.
- open an email message, store email messages using a suitable planned structure, save attached file(s), store files using an appropriate planned structure.
- create new messages using address, subject, reply, forward, carbon copy, blind carbon copy, attach file(s).
- manage and save contact details using an address book by adding a new contact, deleting a contact, storing contacts using a planned structure, retrieving contact details, creating and using groups effectively.

#### Assessment at a glance:

- A. Theoretical Exam:
- B. Practical Exam :