

Your Personal Computer Masterclass: Understand, Operate, Optimize!

Hello! These 2.5 hours are your personal expedition into the world of your computer. The goal is not only to know *what* the individual parts do, but *how* they work together and *how* you can gain full control over your digital environment. You will research, experiment, and fine-tune your computer to suit your needs.

Take your time with each block. The goal is to develop deep understanding and practical confidence.

Total Duration: approx. 2.5 hours **You need:** Your computer (laptop/PC), a notebook (digital or physical) and a pen, internet access for research.

Block 1: Diving into the Hardware (approx. 45 minutes)

(Focus: Components & Functionality)

Task 1: The "Inside Report" (30 min)

Goal: You will learn the specific hardware specifications of your own computer and understand their significance.

Instructions:

1. Find system information (15 min):

- Find out how to access your computer's basic system information.
 - **Windows:** Right-click "This PC" -> "Properties" or Start Menu -> "Settings" -> "System" -> "About."
 - **macOS:** Apple menu (top left) -> "About This Mac."
- Write down the exact details of your:
 - **Processor (CPU):** (e.g., "Intel Core i7-11800H" or "AMD Ryzen 7 5800H")
 - **Memory (RAM):** (e.g., "16.0 GB")
 - **Drive (SSD/HDD):** Find out whether you have an SSD or HDD and its size (often under "Storage" or "Drives" in system info or file manager).
 - **Graphics card:** (If present, often listed under "Display adapter" or "Graphics" in system info).

2. Understand the values (15 min):

- Research briefly (2–3 minutes per component) what the numbers and letters of your components mean (e.g., "i7," "16 GB RAM," "SSD").
- Write in your notebook:
 - **Your CPU model:** What does the model number say about performance (fast/slow, number of cores)?

- **Your RAM:** Is it a lot or a little by today's standards? How does the amount affect your work?
- **Your drive type:** What are the main advantages of your drive (speed/capacity)?

Task 2: Understanding data flow (15 min)

Goal: You explain to yourself how data flows through your computer during a specific action.

Instructions:

1. Choose a scenario:

- a) You open a large image editing program and load a photo.
- b) You start a demanding computer game.
- c) You write and save a long document in Word.

2. **Describe the data flow:** In your notebook, describe how the various hardware components (processor, RAM, drive, peripherals) would work together in your chosen scenario—from the command to display/save. Use the terms and analogies you learned.

Block 2: Mastering the Interface & Navigation (approx. 60 minutes)

(Focus: Controls & Window Management)

Task 3: Your Desktop in Practice (30 min)

Goal: You explore and personalize the basic controls of your desktop.

Instructions:

1. Explore the desktop (10 min):

- Start your computer and close all programs. Look at your desktop.
- **Identify:** Where is your taskbar/dock? Where is the Start Menu/Launchpad? Which icons are on your desktop?
- **Action:** Open the Start Menu/Launchpad. Scroll through all your installed programs once. What do you notice?

2. Customize the taskbar/dock (10 min):

- Choose **two** programs you use often but which are not yet in your taskbar/dock.
- **Action:** Pin these two programs to your taskbar/dock for quick access (usually by right-clicking on the program icon -> "Pin to taskbar" / "Keep in dock").
- **Action:** Open 3–4 different programs (e.g., browser, text editor, calculator). Observe how the icons in the taskbar/dock indicate they are active. Switch between them with a click.

3. Window workout (10 min):

- Open several windows at once (e.g., browser, file manager, Word document).
- **Action:** Try each window function:

- Drag a window by its title bar to move it.
- Resize windows by dragging their edges.
- Minimize all windows to the taskbar/dock.
- Maximize a window to full screen.
- Close all windows one by one.

Task 4: Navigation Challenge (30 min)

Goal: You navigate confidently through your folder structure and find files efficiently.

Instructions:

1. File manager expedition (15 min):

- Open the file manager (Explorer/Finder).
- **Create a new folder:** Inside your "Documents" folder, create a subfolder called "LearningMaterials_IT."
- **Move/copy a file:** Find any text file (or create a short one with Notepad/TextEdit) and move or copy it into your new folder.
- **Navigate:** From your "LearningMaterials_IT" folder, use the path to go back to your main "Documents" folder.

2. Search training (15 min):

- **Search for a file:** Open the file manager and use the search function. Enter the exact name of a file you know exists (e.g., a specific PDF or image). Can you find it?
- **Search by type:** Enter in search: ".jpg" (Windows) or "Kind:Image" (macOS) to find all images. Or ".pdf" for PDFs. What do you find?
- **Reflection:** Was the search effective? How could you improve your own folder structure to find files faster? Write down 1–2 ideas.

Block 3: Your PC – Personally Tuned (approx. 45 minutes)

(Focus: Basic Settings & System Operation)

Task 5: My Personalized System (25 min)

Goal: You find and adjust key system settings to tailor your computer to your needs.

Instructions:

1. Find system settings (5 min):

- Locate your system's "Settings" (Windows: Start Menu -> gear icon; macOS: Apple Menu -> "System Preferences").

2. Check time & language (10 min):

- Navigate to "Time & Language" settings.
- Check if automatic time setting is enabled and your time zone is correct.

- Check if your preferred keyboard layout (e.g., German) is selected. If not, change it briefly and then switch it back.

3. Display comfort (10 min):

- Go to display settings (Windows: "System" -> "Display"; macOS: "Displays").
- Change your **background image** once to any picture of your choice and then back to default.
- **Action:** Test the "scaling" option for text and apps (e.g., from 100% to 125%) and observe how the size of elements changes. Reset it to the recommended value afterward.

Task 6: System Control & Notes (20 min)

Goal: You understand system commands and know when to use them.

Instructions:

1. System notes (10 min):

- Explain in your notebook the difference between:
 - **Log in & Log out:** When does it make sense to log out instead of shutting down the computer?
 - **Restart & Shut down:** When do you choose "Restart" and when "Shut down"? Give one example each.

2. Practical test (10 min):

- **Log out briefly:** Test your system's "Log out" function and then log back in.
- **(Optional & if safe):** If you have time, your work is saved, and you want to, perform a **restart** of your computer. Observe how long it takes.

Final Reflection (approx. 5 minutes)

Take a moment at the end and answer these questions in your notebook:

1. Which setting or function you tried today was the most useful or surprising?
2. Is there anything you will now do differently to use your computer more effectively?
3. Do you feel more confident now in handling your computer and its basic functions?