

# Miniforge + Conda Environments on Windows: Student Setup Guide

## Step 1: Download and Install Miniforge

1. Go to: <https://github.com/conda-forge/miniforge>
2. Under 'Assets', download: Miniforge3-Windows-x86\_64.exe
3. Run the installer:
  - Use default settings
  - Check 'Add Miniforge to PATH' or ensure it's available via terminal
  - Choose 'Register Anaconda Prompt as default' if available

## Step 2: Open the Miniforge Prompt

1. Open the Start Menu
2. Search for and open: 'Miniforge Prompt'  
(Not the regular Command Prompt)

## Step 3: Create a New Conda Environment

1. Use the following command to create an environment named 'research':  
`conda create -n research python=3.11`
2. When prompted, press 'y' to confirm installation
3. Activate the environment:  
`conda activate research`

## Step 4: Install Packages

1. Once the environment is active, install packages as needed:  
`conda install numpy pandas jupyterlab`  
`conda install -c conda-forge matplotlib scipy`
2. Or install pip-only packages:  
`pip install seaborn`

## Step 5: Launch JupyterLab (Optional)

1. While in the environment:  
`jupyter lab`
2. This will open JupyterLab in your browser

## Step 6: Managing Environments

- List all environments:  
`conda env list`
- Remove an environment:  
`conda env remove -n research`

## Troubleshooting Tips

- If 'conda' is not recognized, open the Miniforge Prompt or add Miniforge to your system PATH.
- To update conda itself:  
`conda update conda`
- To deactivate your environment:  
`conda deactivate`