

UV Cheatsheet

Front: Python + project + venv. Back: deps/lock/export + tools + run.

Python versions (replaces: pyenv)

Purpose	Command
Install a Python	<code>uv python install <version></code>
List versions	<code>uv python list</code>
Use version in project	<code>uv python use <version></code>
Auto-install required version	<code>uv run --python <version> script.py</code>
Pin version	<code>uv python pin <version></code>

Virtual env (replaces: venv)

Purpose	Command
Create venv	<code>uv venv</code>
Create w/ specific Python	<code>uv venv --python <version></code>
Activate (Windows)	<code>.venv\Scripts\activate</code>
Activate (Linux/macOS)	<code>source .venv/bin/activate</code>
Reinstall deps	<code>uv sync --reinstall</code>

Project basics (replaces: poetry)

Purpose	Command
Init project	<code>uv init <project-name></code>
Add dependency	<code>uv add <package-name></code>
Add dev dep	<code>uv add --dev <package-name></code>
Remove package	<code>uv remove <package-name></code>
Lock deps	<code>uv lock</code>
Upgrade lock (all)	<code>uv lock --upgrade</code>
Upgrade lock (one)	<code>uv lock --upgrade-package <package-name></code>

Install & export (replaces: pip / pip-tools)

Purpose	Command
Install from pyproject	<code>uv sync</code>
Exclude groups	<code>uv sync --no-group dev --no-group lint</code>
Install requirements.txt	<code>uv pip install -r requirements.txt</code>
Freeze requirements.txt	<code>uv pip freeze > requirements.txt</code>
Export from lock	<code>uv export --format requirements-txt > requirements.txt</code>
Upgrade & apply (all)	<code>uv sync --upgrade</code>
Upgrade & apply (one)	<code>uv sync --upgrade-package <package-name></code>

Global tools (replaces: pipx)

Purpose	Command
Install tool	<code>uv tool install <tool-name></code>
List tools	<code>uv tool list</code>
Uninstall tool	<code>uv tool uninstall <tool-name></code>
Upgrade one tool	<code>uv tool upgrade <tool-name></code>
Upgrade all tools	<code>uv tool upgrade --all</code>

Run & one-offs

Purpose	Command
Run script in venv	<code>uv run <script.py></code>
Run command in venv	<code>uv run -- <command></code>
Run w/ temp dep	<code>uv run --with <package> python script.py</code>
One-time CLI tool	<code>uvx <tool-name> --version</code>
Shell completion (bash)	<code>eval "\$(uv generate-shell-completion bash)"</code>