

CAD Workstation Desktop PCs

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Design & Documentation



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CAD workstations are desktop PCs specified for 3D modelling, slicing and rendering, with fast processors, dedicated graphics, ample RAM and reliable storage. They are the tools behind Fusion 360, Tinkercad, Onshape and slicer workflows that D&T lessons depend on.

Key Features

- Multi-core processors with high clock speeds
- Dedicated graphics cards for 3D viewports
- 16-32 GB RAM typical
- SSD storage for fast load times
- Quiet, cool chassis for classroom rooms

Typical Uses in the Workshop

- Run Fusion 360, Onshape and Blender smoothly
- Slice and send 3D print jobs
- Model and simulate mechanisms in CAD
- Run laser and CNC control software

Safe Operation

1. Log in with managed accounts and profiles
2. Save work to the network or cloud
3. Shut down cleanly to protect projects
4. Keep the workstation area clear and cool
5. Report slow or faulty machines promptly

SAFETY NOTES

- Keep drinks away from the keyboards
- Secure cables out of walkways
- Check ventilation is unobstructed
- Do not let students install unauthorised software
- Use managed power settings to save energy

Maintenance & Consumables

- Update drivers and software on schedule
- Clean dust from fans and vents
- Check disk space and back up projects
- Run disk health checks termly
- Re-image machines with the standard build

Specification & Buying Notes

Buy workstations with a dedicated GPU, 32 GB RAM and an NVMe SSD for comfortable Fusion 360 use. Spare monitors and keyboards wear fastest. A class set with quiet cases suits classroom noise.