

# Safety Guidelines for 3D Printing

EOSMS201C

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Page1 of 10

1

adheres to these guidelines and other environmental health and safety policies.

- Coordinate with Maintenance and Operations and Environmental Health and Safety (EHS) Department for the installation of new equipment.
- Ensure that the affected department's personnel receive safety training on the safe use of 3D printers.
- Ensure prompt reporting and appropriate investigation of any incidents.
- Adhere to all applicable regulations and standards.

## B. Faculty, Staff, and Students

- Understand and comply with the requirements of these guidelines.
- Complete all required safety training.



### 3. Chemical Hazards

In addition to UFP and VOCs exposure, 3D printing can also emit numerous compounds such as polycyclic aromatic hydrocarbons (PAHs), phthalates, ozone, metal, or metalloid dusts.





- The printer nozzle should be cleaned before each use to remove filament residues left on the nozzle after printing to minimize emission from thermal degradation of the residue. Any filament, glue or tape residue left on the base plate should also be cleaned before each use. Follow the manufacturer's pre-print and post-print inspections and maintenance instructions, including on the selection

## A. Personal Protective Equipment

To protect against the various chemical and physical hazards, use of appropriate PPE may be required depending on the task. Please review the following chart for PPE that may be required.

### Body and hand protection

- Wear the appropriate chemical resistant gloves, laboratory coat or apron when working with hazardous chemicals such as flammable solvents, corrosive



## 10. Incident Reporting

All incidents, including near misses, involving the 3D printing operation should be promptly reported in accordance with the University's [Incident Reporting and Investigation procedures](#)

