

Item 9-I



MEMORANDUM

Office of the Vice President for Administrative Services

To: Dr. Ponce and the Board of Trustees

From: DeDe Griffith

Date: August 8/19/2025

Re: Consider purchasing the Desktop Metal Studio Series 2 - 3D Metallic Printer for the integrated robotics & automated manufacturing (Medallion line) training system from Advanced Technologies Consultants through the TIPS #210902 for \$256,100 for the Temple Campus, funded by the capital campaign naming and equipment funds.

Staff Recommendation: Approval

The Board is asked to consider a purchase of the Desktop Metal Studio Series 2 - 3D Metallic Printer for the integrated robotics & automated manufacturing (Medallion line) training system from Advanced Technologies Consultants through the TIPS #210902 for \$256,100 for the Temple Campus, funded by the capital campaign naming and equipment funds.

Purchase Approval



Description: Consider purchasing the Desktop Metal Studio Series 2 - 3D Metallic Printer for the integrated robotics & automated manufacturing (Medallion line) training system from Advanced Technologies Consultants through the TIPS #210902 for \$256,100 for the Temple Campus, funded by the capital campaign naming and equipment funds.

Recommendation: The Board is asked to consider purchasing the Desktop Metal Studio Series 2 - 3D Metallic Printer for the integrated robotics & automated manufacturing (Medallion line) training system from Advanced Technologies Consultants through the TIPS #210902 for \$256,100 for the Temple Campus, funded by the capital campaign naming and equipment funds.

### Strategic Importance

Adding a **metallic 3D printing capability** to the Integrated Robotics & Advanced Manufacturing Training System positions the College at the **leading edge of workforce development**. By expanding beyond plastics and composites into **industrial-grade metal fabrication**, the College aligns more closely with the **real-world applications and demands of advanced manufacturers**. This will differentiate our programs from competing institutions and establish us as a **regional leader in Industry 4.0 training**.

### Educational Benefits of the Desktop Metal Studio Series 2

The **Desktop Metal Studio Series 2** provides a **safe, accessible, and scalable solution** for teaching metallic additive manufacturing. Unlike traditional powder-based systems, this model uses a **fused deposition modeling (FDM) process** with unique advantages for an educational environment:

- **No hazardous powders or fumes** – eliminates risk of toxic exposure and allows operation without external venting.
- **Simple media format** – pencil-sized rods of metal and binding agent are easy to store, handle, and load.
- **Clean process** – minimal residue and no hazardous waste disposal needs.
- **Tight tolerance production** – ensures parts produced are ready for use immediately after sintering, with no post-machining required.
- **Modular maintenance** – robust dual print heads with lower cost replacement, reducing long-term expenses.
- **CAD/CAM compatibility** – Live Studio software seamlessly converts most standard CAD/CAM files into print-ready designs, reducing barriers for student projects.



### Workforce & Industry Relevance

Metallic 3D printing is a rapidly expanding field in all manufacturing **including** aerospace, automotive, defense, and medical device manufacturing. By incorporating this technology, students gain hands-on experience in **design-to-production workflows** that mirror high-demand industry practices. Graduates will be prepared for positions as:

- **Advanced Manufacturing Technicians** – with additive + subtractive manufacturing experience.
- **Design & Prototyping Specialists** – able to create and test metal parts rapidly.
- **Process Engineers & Quality Technicians** – skilled in analyzing tolerances and production quality of metallic components.

This capability also provides opportunities for **industry partnerships**, where local manufacturers could collaborate with the College on prototyping and workforce training.

### Competitive Advantage for the College

- Establishes Temple College as **one of the few regional training centers** to integrate metallic additive manufacturing with robotics and automation.
- Increases the **attractiveness of programs** for prospective students seeking cutting-edge technical education.
- Enhances the College's ability to **compete for grants, industry partnerships, and national recognition** in advanced manufacturing innovation.

The purchase will be made through **Advanced Technologies Consultants**, utilizing the **TIPS Contract #210902**, ensuring a compliant and cost-effective procurement process. Purchases made from Advanced Technologies Consultants through the TIPS Cooperative satisfy the required bidding laws found within Texas Education Code 44.031. ATC provides: As with all ATC purchases, the 3D metallic printer will include an additional year of warranty extended past the manufacturer's warranty, Service for the lifetime of the equipment, unlimited training and retraining instructors (remote and in person as available).

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**Recommendation:** Approval of the purchase of the Desktop Metal Studio Series 2 - 3D Metallic Printer for the integrated robotics & automated manufacturing (Medallion line) training system from Advanced Technologies Consultants through the TIPS #210902 for \$256,100 for the Temple Campus, funded by the capital campaign naming and equipment funds.

Item 9-1



Funds Available:

\_\_\_\_\_ Budgeted

\_\_\_\_\_ Fund Balance

  X   Other: Temple College Capital Campaign

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Approved:

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Dr. Gisela Figueroa

Associate Vice President for Finance

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Date