



Field Notes

Growing Opportunities
in Agriculture at Rhodes State

February 2026

Diggin' In

Bridging the Gap: Bringing High-Tech Agriculture to Your STEM Classroom

Are you a STEM educator looking for fresh, high-impact ways to engage your students with real-world applications? Rhodes State College, in partnership with the National Science Foundation (NSF), invites you to an exclusive professional development workshop from June 22–26, Monday - Friday.

Agriculture is no longer just about biology; it is a powerhouse of engineering, data science, and advanced technology. This workshop is designed to help you integrate these cutting-edge concepts into your existing Science, Technology, Engineering, and Mathematics curricula while meeting state and national teaching standards.

What to Expect

This isn't your typical lecture-based seminar. You will engage in hands-on activities, from analyzing soil sensor data to exploring the physics of autonomous machinery, that can be directly translated to a classroom setting.



A Summer Institute participant takes their class to real life Ag. STEM activity.

As part of the program, participating educators will:

- **Develop a Custom Unit:** Create a classroom unit that demonstrates the vital link between Ag-Tech and your specific STEM subject.
- **Implementation & Follow-up:** Bring your lesson to life during the fall semester and return in January to share your results, student responses, and instructional insights with your peers.

Support for Your Professional Growth

We value your time and expertise. To support your participation, this NSF-backed program provides:

- **A Daily Stipend:** Participants receive **\$300 per day** for the duration of the June workshop.
- **Material Stipend:** Funding specifically designated for classroom materials to help you launch your new Ag-STEM unit.

Join us this **June (22-26)** at Rhodes State to transform how your students see the world of agriculture. Space is limited for this prestigious collaboration.

For more information, email Jim Uphaus at uphaus.j@rhodesstate.edu.

Precision Ag Training:



Precision Ag Training for Ag Educators

Agriculture teachers, we haven't forgotten about you! We're offering a specialized professional development session focused on the cutting edge of soil technology.

Gain hands-on experience with **Prescription Mapping** and **G.I.S.** tools to explore real-world soil variation. This

training provides the technical skills you need to bring modern, data-driven farming practices into your classroom.

To secure your spot or ask questions, email Jim Uphaus at uphaus.j@rhodesstate.edu. Don't miss this chance to master the future of agriculture.

The Digital Revolution

Is Precision Tech Your Next Move?

Agriculture is undergoing a high-tech transformation, creating one of today's most lucrative "hidden" careers: the **Precision Equipment Technician**. If you love technical challenges but hate the idea of a desk job, this field is the perfect fit.

Modern technicians are "digital surgeons" for heavy machinery. Rather than using sledgehammers, they use laptops and diagnostic interfaces to manage:

- **Satellite Guidance Systems:** Ensuring centimeter-level GPS accuracy.
- **Complex Electronics:** Troubleshooting sophisticated onboard computers.
- **Integrated Systems:** Mastering the interplay of hydraulics and electrical power.

This specialized skill set commands a premium. While many four-year graduates face heavy debt, precision technicians can enter the workforce with just a two-year degree and earn between **\$80,000 and \$100,000**



Ag. Precision Technician at work.

annually. It's a role that rewards independent problem-solvers who can perform high-level diagnostics on-site.

Start Your Career at **Rhodes State**. Rhodes State College offers a dedicated **Precision Equipment pathway** designed to transform curious students into certified professionals in just two years. Skip the "grease-monkey" stereotype and join the digital revolution in the field.

The future of agriculture is not just in the soil- it's in the software.

A Day in the Life: Precision Equipment Technician

What does a career at the intersection of heavy iron and high-tech software actually look like? Here is a snapshot of a typical day:

- **7:30 AM | Digital Diagnostics:** You arrive at the shop and sync your laptop with a tractor's onboard system. You aren't grabbing a wrench; you're analyzing error codes in the **ISO-BUS system**.
- **9:30 AM | Satellite Calibration:** You travel to a farm to calibrate a **GPS Guidance System**, ensuring a harvester can maneuver with sub-inch accuracy across hundreds of acres.
- **11:30 AM | Schematic Troubleshooting:** Using a tablet, you trace a faulty solenoid in a pneumatic system by interpreting complex **electronic and hydraulic schematics**.
- **2:00 PM | Field Testing:** You run a harvester while monitoring live data feeds to ensure the **Electronic Control Units (ECUs)** are optimizing fuel efficiency in real-time.
- **4:30 PM | Reporting:** You wrap up digital service logs, documenting the software fixes that kept the fleet running.

What's on the Horizon?

July 15, 2026

Inaugural Youth Crop Scouting Contest FFA and 4-H teams

(2-4 students) are invited to the first-ever Ohio Youth Crop Scouting Contest on July 15, 2026. Showcase your skills in pest ID and crop growth stages.

Register/Interest



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