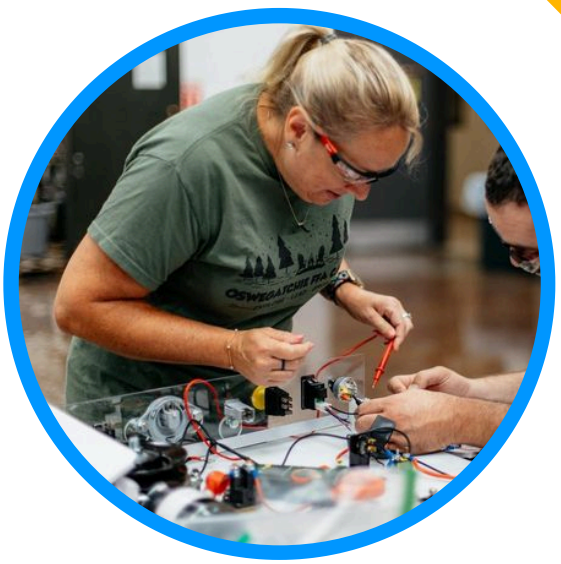
AGRICULTURAL EQUIPMENT MAINTENANCE & TECHNOLOGY

Minnesota State Northern Agricultural Center of Excellence | AgCentric Connecting Education & Agriculture

Course Description

Agricultural Equipment Maintenance and Technology (AEMT) is a course designed to prepare students with the skills needed to enter the career field as an agricultural technician. Throughout the course, students develop a technician's troubleshooting mindset through rigorous hands-on experiences in the classroom and laboratory.



In partnership with Associated Equipment Distributors Foundation (AEDF), AEMT is recognized as a program that teaches students skills needed to jumpstart their careers in the equipment industry. Each school can receive guidance and support by partnering with a local equipment dealer through the AEDF High School Recognition program.

Equipping teachers

- Specialization level
- Full year course
- Inquiry and project-based instructional practices
- CASE Institute professional development

AED Foundation
Constructing Paths to Opportunity

Engaging students

- Operate tools to identify and fix equipment failures
- Complete work orders and journal tasks and observations.
- Use the diagnostic process to identify equipment failures and corrections.
- Use science, technology, engineering, and math to solve industry-based problems
- Demonstrate relevant personal and shop safety practices.

Instructional Units

- Agricultural Equipment
- Drive Systems
- Precision Agriculture
- Electrical and Digital
- Diesel Systems
- Hydraulics
- Partnering in the Field

Flexibility & Adaptability

CASE provides a comprehensive professional development experience, in addition to a work-life balance so teachers can best educate their students. Course work is adaptable and customizable based on teacher preference to fit all geographies and communities.

scan or visit case4learning.org

> "The AEMT curriculum has allowed me to prepare my students to better understand electrical, hydraulic, and diesel fuel systems including CAN bus. It allows me to teach high level concepts on an Ag Teacher's budget. I believe it is the best curriculum available for teaching these concepts."
>
> **- Mark Meyer, Kansas**

This course is correlated to G-W Heavy Equipment Powertrains and Systems text

G-W Publisher

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Equipping Teachers Engaging Students

case learning

CURRICULUM FOR AGRICULTURAL SCIENCE EDUCATION

Mission

To design industry-leading, inquiry-based curriculum and teacher education to create lifelong learners and prepare students for the future of agriculture.

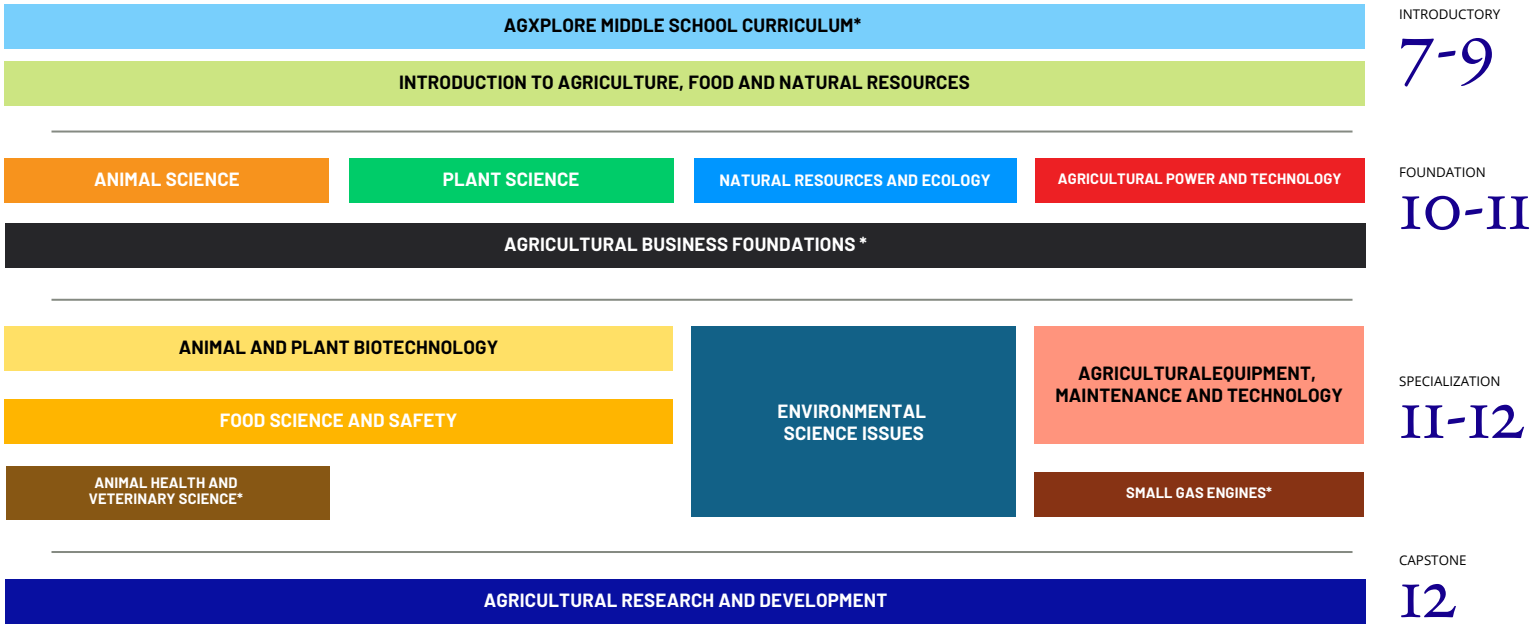
Purposeful Curriculum

CASE has sequenced courses at four levels that enhance the delivery of agricultural education through inquiry-based learning and technical skills.

Standards Aligned

CASE develops curriculum with industry feedback and aligns courses to National Agriculture, Food, & Natural Resources and Career & Technical Education standards.

Courses and Instruction Levels



Professional Development and Lifetime Certification

CASE 4 Learning enhances agricultural education with inquiry and project-based learning to prepare the next generation of the agricultural workforce through teacher certification and professional development.

CASE Institutes

Professional development events preparing teachers to implement full-year CASE courses. Institutes provide teachers the content and skills needed to use CASE curricula in their classroom. CASE Institutes range from five to eight days in a hybrid, in-person, or virtual format.

BriefCASEs *

Professional development for shortened CASE courses or modules. BriefCASEs range from one to three days.

Grants & Scholarships

Corporate sponsors and donors throughout the agriculture industry support CASE teachers through funding material implementation grants and professional development scholarships. Teachers are eligible to apply in the fall to fund their programs in the following year.

Certification

Once the teacher is certified by attending a CASE Institute or BriefCASE, they have lifetime access. There are no subscriptions or renewal fees!

In-Person
Teachers attend the entire training at the host site.

Virtual
Teachers attend the entire training online. Teachers will receive materials via mail, and are responsible for their lab space.

Hybrid
Teachers receive training both virtually and in-person based on the course.

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