

**IOWA FFA AGRICULTURAL MECHANICS  
CAREER DEVELOPMENT EVENT**

**PERSONNEL**

Dr. Tom Brumm, Ag and Biosystems Engineering, ISU ..... CDE Coordinator  
Jim Green, Riceville ..... CDE Chairperson

**EVENT OBJECTIVES**

1. To motivate high school Agricultural Education students to develop understandings and learn skills in:
  - a. Machinery and Equipment Systems – processing, materials handling, adjustments, metal fabrication, maintenance and repair.
  - b. Industry and Marketing Systems – customer relations, accounting, communication, economics, safety, service calls, reading and understanding labels, planning, regulations.
  - c. Energy Systems – mechanical power, electrical power, chemical power, wind power, solar power, water power.
  - d. Structural Systems – concrete, plumbing, structural material selection, heating, ventilation, air conditioning, metal and wood construction.
  - e. Environmental/Natural Resource Systems – water quality, material compatibility, soil and water conservation, handling of waste, recycling.
2. To develop hands-on performance operations in agricultural mechanics.
3. To develop the ability to gather information and solve problems related to agricultural mechanics.
4. To develop the ability to follow safety practices in all agricultural mechanics activities.
5. To obtain knowledge and skills in agricultural mechanics which will be helpful in future careers related to agricultural mechanics.
6. To develop interpersonal and teamwork skills.

**GENERAL RULES**

1. Each school may enter a team composed of three or four participants, with the three highest scores counting for the team total score. Team members must all be from the same chapter.
2. Each participant will participate in all phases of the event.
3. Participants must supply and wear Industrial Quality Eye Protection spectacles (Style B), or Goggles during the skill phases of the event. Coveralls or a shop coat may be worn during the skill phase of the event. Appropriate footwear is required. (Work boots or work shoes recommended. No sandals or cloth shoes are allowed.)
4. Participants shall report to the chair of the event between 8:15 a.m. and 8:45 a.m. on event day. Registration location will be provided prior to event day. Parking available in Lot 29 north of Davidson Hall.
5. Answer sheets, worksheets and other written materials will be furnished for each event phase.

**EVENT ACTIVITIES**

1. Four types of activities will be completed during the event. These include:
  - a. Individual Problem-Solving/Skill Development Activities

- b. Team Problem-Solving Activity
  - c. Written Examination
  - d. Individual Computer Application Activity
2. Participants will be given 50 minutes for the written exam, 15 minutes for each of the five individual problem-solving/skill activities, 15 minutes for one individual computer application activity, and 50 minutes for the team problem-solving activity.
  3. All activities will be conducted at the Agricultural & Biosystems Engineering Dept. (Davidson Hall) on the Iowa State University campus.
  4. The examination questions will be developed from either problem-solving or skill competencies. Team activities will be developed from the problem-solving competencies, while individual performance activities will be developed from either the problem-solving and/or skill competencies. These competencies are found in “The Official Rules and Regulations for National FFA Career Development Events – 2001-2005.”

**REFERENCES**

1. “Career Development Events – 2001-2005” (National FFA Organization rules) will apply in a general way to this event.
2. The event coordinator will send additional reference materials (operator manuals and additional event information) three weeks prior to the event, if needed.

**SCORING AND RANKING OF TEAMS AND PARTICIPANTS**

1. To determine the individual and team winners, the participants will be ranked on the basis of the total score for all activity areas.

<u>Phases</u>	<u>Scoring</u>
Test .....	60 points
Problem Solving .....	125 points
Computer Application .....	25 points
<b><u>Total Individual Scores</u></b> .....	<b><u>210 points</u></b>
3 participants total score possible .....	<b><u>630 points</u></b>
 Team Problem Solving .....	 150 points
<b><u>Team Total Score Possible</u></b> .....	<b><u>780 points</u></b>

2. Teams will be ranked into groups designated “Gold,” “Silver,” and “Bronze.” Only the top three team members’ scores will count for team score. The top three scores will count in each division or category regardless of overall individual ranking used in computing the overall team score. All team members are eligible for individual awards. Teams which do not have three members will be listed as “Participants.” Teams which violate any rule will also receive a “Participation” rating.
3. The team winner on all areas will be designated the “Iowa Champion FFA Agricultural Mechanics Team” and will represent Iowa in the National FFA Agricultural Mechanics Career Development Event in Louisville, Kentucky in October if all team members were “active” FFA members before the state event.

4. For teams and individuals, ties will be broken first by the written exam score and second by the total individual problem-solving/skill development score.

### AWARDS

Awards listed below are at the discretion of the sponsor and pending availability of sponsorship. It is vitally important that participants write thank you letters to sponsors in order to retain their support. A thank you list naming current sponsors will be provided to each participating chapter at the event site.

Award sponsored through the National FFA Foundation:

Champion Team .....	Plaque
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Awards sponsored through the Iowa FFA Foundation:

Champion Team.....	Cash award for travel to National FFA Ag Mechanics CDE	
Reserve Champion Team.....		Plaque
Top 10 Teams .....		Rosettes
Members of Top 10 Teams.....		Rosettes
Top 10 Individuals.....		Rosettes
1 <sup>st</sup> and 2 <sup>nd</sup> Place Individuals.....		Trophies
Top Team and Top Individual .....		Trophies
<ul style="list-style-type: none"> <li>a. Machinery and Equipment Systems</li> <li>b. Environmental/Natural Resources Systems</li> <li>c. Structural Systems</li> <li>d. Energy Systems</li> <li>e. Industry/Marketing Systems</li> </ul>		

The Iowa FFA Association will award certificates to all Agricultural Mechanics teams and participants.