**PA FFA Agricultural Technology and Mechanical Systems**

**Career Development Event**

***Chairperson Information***

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| **CDE Chairpersons** | Matthew R. Webreck & John Hines |
| **Email** | jhines@westperry.org mwebreck@bbsd.com |
| **Contest Date/Times** | PA FFA State Convention – 2 Day Event  |
| **Contest Location** | Bellwood-Antis High School |
| **CDE Review Time** | February |
| **CDE Review Location** | State Events |

***Basic CDE Guidelines***

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| **Event Type:** Team | **# of Team Members:** 3-4 |
| Individual Materials List* Z.87 safety glasses, boots, long pants, calculators (not a cell phone), pencils, pens, school appropriate cotton shirt
 | Group Materials List* Z.87 safety glasses, boots, long pants, calculators (not a cell phone), pencils, pens, school appropriate cotton shirt
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| Attire* Day 1 – FFA Official Dress
* Day 2 – Safety glasses, boots, long pants
 | CDE Event Areas* Machinery & Equipment Systems
* Electrical Systems
* Energy Systems
* Structural Systems
* Environmental and Natural Resource Systems
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| Pre-State CDE Expectations* Successful completion of Agricultural Mechanics classes
* Demonstrate safe practices in the shop
* Training in all areas of Ag Mechanics
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| CDE Changes from Previous Years?* No changes
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***CDE Rules***

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| --- | --- | --- |
| **CDE Component** | **Points** | **Component Description** |
| Written examination | 50 | 50 question multiple choice exam |
| Individual activities\* | 150 | 5 activities at 30 points each |
| Team activity | 133.3 | 1/3 of total team score |
| Total Possible Individual Score | 333.3 |  |
| TEAM SCORINGTop three written examinations 150All individual activities for top three individuals 450Team activity 400*Total Possible Team Score (top three) 1,000*\* *Subject to change based on available stations in a given year***Causes for Disqualification:** Violation of FFA Code of ConductDisregard for SafetyNot having a team of 3 or 4 membersAny other reason determined appropriate by the committee |
| **Tie-breaker:** **Team** The team activity scores will be used to break a tie associated with the team rankings. If a tie still exists, the combined written exam scores of the top three team members will be used to break the tie.**Individual** If a tie exists between individuals, the combined highest problem solving/skill scores will break the tie(s). If still tied, the highest written examination score will be used to break the tie. |

***Resources***

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| This list of references is not intended to be all-inclusive. Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.*Agricultural Mechanics Fundamentals and Applications*. Delmar and Thompson*Introduction to Agricultural Engineering - A Problem Solving Approach* by Roth and FieldNational FFA CDE website at ffa.org for Agricultural Technology & Mechanical Systems |

**Team Preparation for Pennsylvania**

Information available from National FFA (ffa.org with advisor login)

-Past National Exams & Keys (ffa.org with advisor login)

-Past National Activities & Keys (ffa.org with advisor login)

-Event-Related Competencies – Agricultural Technology and Mechanical Systems Handbook (ffa.org with advisor login)

Themes – will continue rotation after years expire

Plant Production Systems 2024

Integrated Pest Management 2025

Animal Production Systems 2026

Materials Handling Systems 2027

Processing Systems 2028