

**Resources for FFA Ag Mechanics Career Development Event  
Iowa State University  
June 7, 2012**

Note: This list is not exclusive to any other resources you might find. An attempt was made to find as many resources and references as possible, especially those that are web-based.

**Machinery and Equipment Systems (John Deere Combine Model 9550)**

1. John Deere 9550 Combine base unit operators manual (OMH202764)  
[http://manuals.deere.com/omview/OMH202764\\_19/?tM=FR](http://manuals.deere.com/omview/OMH202764_19/?tM=FR)

**Industry and Marketing Systems (Electrical Motors and Controls)**

1. <http://nasdonline.org/document/1299/d001098/beware-of-electrical-hazards.html>. Beware of electrical hazards, Michigan State University Extension (1993).
2. Electrical Applications for Agriculture. C.J. Bern and D.J. Olson, Wiley-Blackwell, ISBN-10: 0813821991 (2002).
3. Electric motor basics.  
<http://sawdustmaking.com/ELECTRIC%20MOTORS/electricmotors.html>

**Energy Systems (small gasoline engines)**

1. <http://www.briggsandstratton.com/display/router.asp?docid=78484>, enter model/type 133412-0359-A1  
Briggs and Stratton Small Engine Owner's Manual 274785. (133400 model series)
2. [http://www.briggsandstratton.com/maint\\_repair/parts\\_supplies/details.aspx?pid=270962](http://www.briggsandstratton.com/maint_repair/parts_supplies/details.aspx?pid=270962)  
Briggs and Stratton Repair Manual 270962 – no longer available online. Relevant pages will be made available via PDF.

**Structural Systems (Concrete)**

1. Farm and Home Concrete Handbook, MWPS-35. Midwest Plan Service, Iowa State University.  
[http://www.mwps.org/index.cfm?fuseaction=c\\_products.view&catID=710&productID=6448](http://www.mwps.org/index.cfm?fuseaction=c_products.view&catID=710&productID=6448)

**Environmental and Natural Resource Systems (Residue Management/Soil Conservation)**

1. Overview of soil erosion and the Universal Soil Loss Equation (USLE):  
[http://www.envirothon.org/pdf/CG/using\\_the\\_USLE.pdf](http://www.envirothon.org/pdf/CG/using_the_USLE.pdf)  
(Note: the above reference provides soil loss assessment in SI or metric units, where the next two references use US Customary units – but the procedure is the same either way!)
2. USLE guide for Iowa: [http://kaleita.public.iastate.edu/Iowa\\_USLE\\_Guide.pdf](http://kaleita.public.iastate.edu/Iowa_USLE_Guide.pdf)
3. Example on application of the USLE:  
[http://kaleita.public.iastate.edu/Iowa\\_USLE\\_example.pdf](http://kaleita.public.iastate.edu/Iowa_USLE_example.pdf)

### **Computer Skill (Grain handling capacities)**

1. How to use Microsoft Excel:  
[http://spreadsheets.about.com/od/excel101/a/Excel\\_beg\\_guide.htm](http://spreadsheets.about.com/od/excel101/a/Excel_beg_guide.htm). Note: Excel 2011 will be used (only features similar to Excel 2007 will be part of the skill).
2. Grain Drying, Handling and Storage Handbook, MWPS-13. Midwest Plan Service, Iowa State University.  
[http://www.mwps.org/index.cfm?fuseaction=c\\_products.view&catID=715&productID=6468](http://www.mwps.org/index.cfm?fuseaction=c_products.view&catID=715&productID=6468)

### **Team Problem (Metal construction and welding)**

1. TBD
2. TBD

### **Written Exam References**

1. See the above.