

ATMAE Student Division 2010 Robotics Contest

EECT Division Best Electrical/Control Methodology Award – Judging Rubric

University/College Team: _____

EECT Judge: _____

Date: _____

Official Rubric for Judging:

Evaluation Criteria*	Maximum Points Possible	Score
<i>Use of Sophisticated Electrical/Control Components</i>	20	
<i>Innovation of Design</i>	20	
<i>Design Methodology Soundness</i>	20	
<i>Craftsmanship</i>	20	
<i>Documentation</i>	20	
Total	100	

Use of Sophisticated Electrical/Control Components:

This criterion addresses the degree to which the team tried to “push the envelope” with new or sophisticated/complex electronic, electrical, or control component technologies. An automated solution using programmable logic or software solutions would be an example of a high degree of sophistication. The use of an alternative energy fuel source or use of combinational electrical/pneumatics/hydraulics, etc. might also represent a sophisticated use.

Innovation of Design:

This criterion addresses the degree of creativity and uniqueness taken to address the challenge/contest in the electrical and control technologies that were deployed. Evidence of innovative computer programming and communications protocols may also be considered.

Design Methodology Soundness:

This criterion addresses the soundness of the approach taken to address the challenge/contest. Reliability and perceived performance must be considered.

Craftsmanship:

How neat is the robot wired? What is the quality of the solder joints? This criterion addresses the attention to detail that the team has taken to complete their physical robot entry.

Documentation:

This criterion addresses the team’s efforts to properly document their robotic entries electrical/electronic and control technologies systems. Proper use of schematics and code comments are included under this criterion. Note: the documentation may or may not be included on the poster – the team is responsible for providing evidence to the judges at the time of the evaluation.