HARDWARE ROBOTICS

Projects may be constructed from kits or published schematic drawings, modified from other devices to create new applications, or constructed from the students' own concepts and designs. The projects must have some obvious relationship to the computer and controlled through student programming. Students may build computerized devices provided that the reason for the design shows a direct instructional or commercial usage. Such projects must have a notebook as described above.
Students will be able to enter robots that have been entered in other competitions (ex: BEST, VEX) as long as the robot was built by the student entering it in ACTE.

All entries must be a working piece of electronics. Mechanical and motor driven devices entered must be controlled by computers (either hard-wired or remotely) that are programmed by students in order to be eligible. Students must be able to show they have written the programs to control such devices. Examples of commercially available kits are robotic "arms" or robot movers, Lego and K'Nex-style building kits, Capsella, and Technics style robotics kits.

Scientific laboratory measurement devices using a logic board or computer based technologies, unless constructed by the student, are not considered part of the ACTE Technology Fair competition.
Students will be required to demonstrate their project, explain how it works, what it does, and its purpose. Judging will be on the basis of the significance of the project, the quality of workmanship, demonstration of the project's function and explanation of purpose. As in other categories, the use of notebooks that document the stages of design and

development will be considered in the final evaluation. Copies of any programming code used to control the devices must be printed and available to judges for review as part of the notebook.