



2018 NJ TSA MIDDLE SCHOOL DESIGN PROBLEMS

CAD Foundations

Design a combination Tape Measure/LED Flashlight that can be used as a gift to visitors of your school. Use CAD to prepare an isometric drawing and the required 2D views. Show only the exterior of the product.

Submit the drawings on maximum paper size of 24" x 36" or smaller sheets mounted on a 24" x 36" sheet with no overlapping papers.

Your drawings will be evaluated using the Official Rating Form, page 43 of the Competitive Events Guide.

System Control Technology

Urban communities throughout the United States have a shortage of parking spaces. Many college campuses, hospitals and office buildings in suburban areas have the same problem. Automated Parking Systems (APS) allow vehicles to be stored without human intervention, and can consume half the space of a conventional self-parking garage.

Design and build a model APS garage that uses a computer, sensors and mechanical components to move a toy car into the garage and park it into an empty slot.