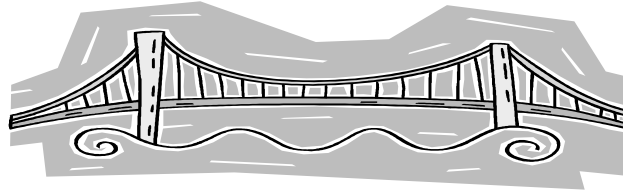


## 7<sup>th</sup> Grade Introduction to Technology Education (Intro-Tech 7)



v2012

Name: \_\_\_\_\_ Class # \_\_\_\_\_

### Course Description

Intro-Tech is beginning action-based educational course that introduce students to several technological systems within the world of engineering. Intro-tech was designed as semester long, follow-on class to CTE-Intro. Students will learn power tool safety practices, basic design skills, measuring and will explore careers in four of the following seven engineering/technology areas: medical technologies, agriculture/biotechnology technologies, energy-power technologies, information and communications technologies, transportation technologies, manufacturing technologies, and construction technologies.

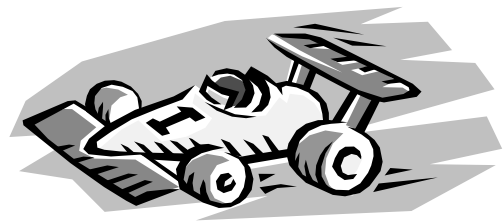
The curriculum is designed around exploration of these systems and their impacts on society. Students will also develop problem-solving skills, career awareness for the Student Educational Occupational Plan (SEOP) development and relate technology/engineering and history to math and science. Emphasis is placed on fun... and producing simple take-home projects with cooperative and individualized activities rather than job-skill development.

### Project Costs

Because of the hands-on nature of this course and the expense for the materials used, there is a \$\_\_\_\_\_ project cost (in addition to the lab fee paid at registration time. Many of you will have paid this at the start of the school year, while others will choose to pay later on.

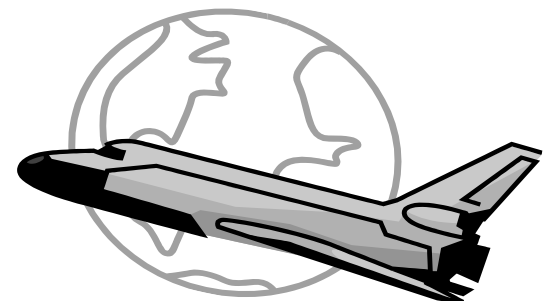
### Classroom & Written work

- Class rules & Disclosure document
- Measurement unit (metric and inches)
- Safety tests
- Tool use demos
- Video worksheets



### Engineering activities (\*work with a partner)

- Paper space vehicle\*
- Geodesic home model
- Popsicle bridge\*
- Marshmallow catapult\*



### Information tech, Communication/Computer activities

- Car Builder software
- West Point Bridge Builder\*

### Material processing, Construction and Energy-power activities

- Propeller car
- Foam racing boat
- Pen set
- Screen printed tee shirt
- Wood carving



<u>Assignments</u> (*partner required)	<u>Pts possible</u>
Student information sheet & class intro	20
Disclosure doc worksheet	26
Disclosure document (signed by parent)	40
Measurement unit (metric and inches)	
<ul style="list-style-type: none"> <li>• Pre test</li> <li>• Measurement tests (inches and metric)</li> </ul>	20 80
Space vehicle & races*	100
Geodesic home video worksheet	22
Geodesic model home w/ floor plan	100
Bridge video and worksheet	15
West Point Bridge Builder*	100
Popsicle bridge construction & load testing*	100
Foam racing boat + races	150
Safety unit, tool demos and safety test	90
Car Builder (fast, slow and mpg cars)	90
Propeller car	100
Wooden pen set	100
Ping pong ball...accelerator!	100
Wood carving	100
Screen printed tee shirt	100

