○ This Course: **Introduction to Engineering**

In this beginning high school course, students acquire a foundation in technological resources including material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. They work in groups to build and control systems using engineering design in the development of a technology.

○ Course Questions:

1. What is technology?

2. What is the Engineering Design Process?

3. What are the fundamental concepts of engineering drawing?

4. How do I produce technical drawings with professional software?

5. How do I communicate a professional design clearly?

Parent Signature:_____

○ Course Standards

- Participation

- Autodesk Software Assignments

- Technical Drawing Standards

- Digital Portfolio

- Creativity

*Please see attached State Competencies List for Technical Drawing

*Each Competency will be covered during this year long class.

| Course Map | This Course: **Introduction to Engineering** | Student: |

includes

Community Principles
- Respect of each other
- Respect for equipment and materials
- Teamwork
- Responsibility
- Dedication

Learning Rituals
- Tutorials
- Design Process
- Computer Work
- Journaling
- Research
- Hands-On Activities
- Webpage Design

Performance Options
- Participation
- Digital Portfolio
- Projects
- Quizzes
- Tests

Critical Concepts
- Define Engineering
- History
- Engineering Drawing Basics
- Engineering Design Process
- Careers
- Workplace Readiness

Learned in these "Units"

Digital Portfolio

Advanced Challenges
- Real World Applications

History of Engineering Drawing

Engineering Careers

Autodesk
- Exploration of Different Software

Engineering Design Process Activities

Exploration of Technical Drawing Techniques