



<b>Technology Engineering &amp; Design Career Pathway (TEND)</b>		
<b>Recommended Pathway Entry</b>	<b>Prerequisite</b>	<b>Concentrator</b>
<b>IC61 Drafting I</b>	<b>TE11 Technology Engineering and Design</b>	<b>TE12 Technological Design (Honors)</b>

## **Drafting I**

*Prerequisite: None*

This course introduces students to the use of simple and complex graphic tools used to communicate and understand ideas, concepts and trends found in the areas of architecture, manufacturing, engineering, science, and mathematics, sketching and computer assisted design (CAD) skills and techniques.

## **Technology Engineering and Design**

*Prerequisite: None*

This course focuses on the nature and core concepts of technology, engineering, and design. Through engaging activities and hands-on project-based activities, students are introduced to the following concepts: elements and principles of design, basic engineering, problem solving, and teaming. Students apply research and development skills and produce physical and virtual models. Activities are structured to integrate physical and social sciences, mathematics, language arts, and art.

## **Technological Design (Honors)**

*Prerequisite: TE11 Technology Engineering and Design*

This honors-level course extends the standard course of study to a more challenging level for the student who is highly motivated, able to work independently and has a history of high academic achievement. This course continues to apply the skills, concepts, and principles of design. The design fields of graphics, industrial design, and architecture receive major emphasis. Engineering content and professional practices are presented through practical application. Working in design teams, students apply technology, science, and mathematics concepts and skills to solve engineering and design problems. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. Art, English, Language Arts, Mathematics and science are required.