# **Engineering Principles**



## **Introduction To Engineering**

In **ECI Model 271S Introduction to Engineering Trainer**, students explore engineering careers, communication techniques, and the design process. As students learn about types of drawings, documentation, and presentations, they develop the skills needed in project development. They are challenged with a design project, and create a model of their own designs.



### Components

Wood Support Block
Plumb Weight
Juicer
Extension Shaft
Shaft Coupler
Modeling Tool Set
Modeling Supplies
Accu-line Drawing System
Cloth Tape Ruler
Ellipse/Circle Set
Triangle Set
Steel Ruler
Graph Paper Package

## The Laboratory Manual

The Lab manual is designed to help students develop a thorough understanding of the subject matter. The manual is clearly written and professionally illustrated. It is printed in two-colors and comes in a quality vinyl binder.

#### **System Familiarization**

Inventory of Tools and Objects

#### Introduction

Introduction to Engineering Advanced Level Internet Searches Research for Technical Information Engineering Careers



#### Communications

Sketching and Perspective Drawings
Orthographic Sketches
Dimensioning
Technical Writing
Technical Writing-Directions
Technical Report
Oral Presentations

#### **The Design Process**

Introduction
Demonstrating the Design Process
Innovation of a Hall Locker

#### Instructor's Resource Guide

The Resource Guide includes sample data and answers to quiz questions, as well as a Student Journal CD. The journal provides a convenient way for students to enter and save their data and answers to experiment questions. The instructor can also have the students print paper copies to hand in for grading.

