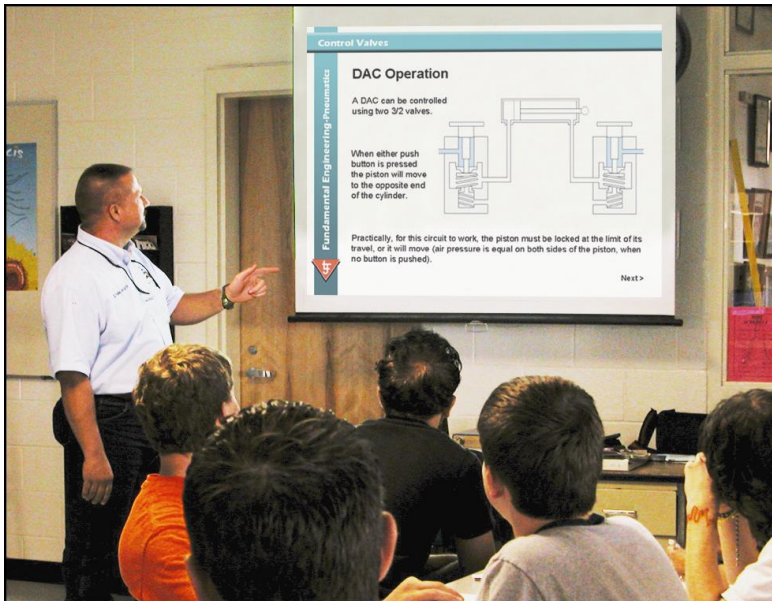


Fundamental Engineering Multimedia Presentations



FEPP01/SRS provides the instructor with a comprehensive set of theory presentations covering fundamental engineering principles. Each presentation has been created using Microsoft® PowerPoint® and covers a specific topic.

The presentations are aimed at students aged 14 onwards, and may be used for introductory or review purposes. Each presentation includes dynamic graphics and integrated questions to test the student's understanding of the topic.

If used with our ClassAct®SRS student response system, students can use SRS keypads to answer the questions in real time. The system will then deliver instant assessment of student performance to the teacher.

Ideally used with a computer data projector for viewing by the whole class, the screens of each presentation build up in a logical, easy-to-follow order, outlining key facts about the topic in hand.

An instructor's Presentations Manual is also provided. This contains hard copies for all presentations, plus the correct answers for all questions.

Presentation topic areas include:

Pneumatics:

- Pneumatics
- Single and double acting cylinders
- Control valves
- Pneumatic circuits – symbols and conventions
- 5-port control valves
- Speed control of cylinders
- Practical cylinders
- Other pneumatic components
- Linear and rotary actuators
- Reciprocating and sequencing circuits

Presentation topic areas (continued):

Mechanisms:

- Mechanisms
- Types of motion
- Gears and gear systems
- Practical applications of gears
- Pulleys and belts
- Levers and linkages
- Cams and followers
- Brakes and clutches
- Powering mechanisms
- Inclined planes

Electronics:

- Electronic systems
- DC Circuits
- AC Circuits, capacitors and rectification
- Electromagnetism
- Switching and current amplification
- Operational amplifiers
- Digital electronics
- Bistable, monostable and astable circuits
- Counting
- Microprocessor systems

Hydraulics:

- Hydraulics
- Applications of hydraulics
- Basic hydraulics laws
- Actuators
- Control valves
- Hydraulic circuit symbols
- Controlling cylinders and motors
- Hydraulic pumps and levers

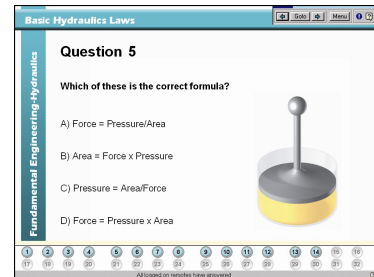
Items supplied with the FEPP01/SRS

Presentations include:

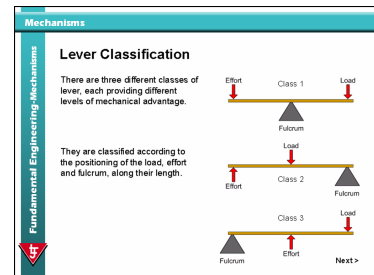
- Fundamental Engineering Principles Multimedia Presentations CD
- Fundamental Engineering Principles Multimedia Presentations Manual

Additional Resources

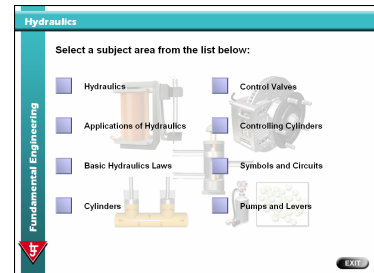
- ClassAct®SRS system (required if students are to respond to questions via SRS keypads).
- Microsoft® PowerPoint® (required if ClassAct SRS® is used, or if the user wishes to customize presentations).



- SRS-enabled question screens can be answered in real time when used with our ClassAct®SRS student response system.



- Key concepts are explored in simple steps.



- If the ClassAct®SRS system is not being used, the presentations can be accessed from an easy-to-navigate menu system.

Module Facts

Order as: FEPP01/SRS Fundamental Engineering Multimedia Presentations

	No.	Average time
Presentations	38	45 minutes
Integrated Questions for ClassAct®SRS	376	
Total		28 hours

Please note:

1. The presentations contained in FEPP01/SRS are also supplied as part of the AP10/SRS Automotive Multimedia Presentations.
2. The electronics coverage in FEPP01/SRS is introductory only. More in-depth electronics study is provided by the EPP01/SRS Electronics Multimedia Presentations.



LJ Technical Systems
 Web site: www.ljgroup.com