

Fundamentals of Engineering: FE Exam Preparation

Instructor Resources

Notes to Course Coordinators and Instructors

These instructor resources have been designed specifically to accompany Kaplan AEC's review text, *Fundamentals of Engineering: FE Exam Preparation*. In general, each chapter of that text has a corresponding set of resources for the instructor. The assumption is that a distinct review session will be provided for each chapter of the book.

Components

For each chapter you will find the following resources:

- *A detailed outline overview of the topic.* This outline maps to the book chapter's outline, for consistency with your students' independent reading and study.
- *A suggested time schedule.* In most cases, the schedule suggests a three-hour lecture review, with a breakdown of minutes per topic. If you wish to lecture for a shorter period of time, use the schedule as a guide to relative emphasis to place on each topic.
- *Lecture outline and notes.* This material is intended as "talking points" to organize and initiate your lecture. No doubt you will wish to expand upon certain topics, such as any that seem to be giving students particular difficulty. The lecture outline and notes are also included in a PowerPoint file of problems and solutions for in-class discussion (see below).
- *Additional problems and solutions.* These are distinct from the problems and solutions that appear in the book and can be used for additional problem-solving practice in the classroom. They are provided in PowerPoint form for convenient presentation and discussion. You may wish to print and distribute a hard copy of the PowerPoint presentation to your students for their ease of reference.
- *Key terms and definitions.* You can print and distribute this list to your students for their independent study. You may also want to highlight the terms in your lecture review.

In addition to technical subjects, students may benefit from a review of ethics topics on the exam and an overview of the exam format and procedures. Resources are provided for these topics as well.

Schedule Considerations

If all the topics included in this resource package are covered, 14 distinct review sessions will be required. If time constraints preclude offering 14 sessions at your institution, here are some considerations for streamlining the review schedule:

- Some review courses may opt to skip review of chemistry and/or mathematics topics, given that these are fundamental and well used throughout the undergraduate engineering curriculum.
- Opportunities exist to combine related topics into a single review session, such as combining statics and dynamics, or dynamics and mechanics of materials.
- An overview of the FE/EIT exam and/or ethics topics might reasonably be left to the students' independent review.