

Fundamentals of Engineering FE/EIT 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/EIT Exam Preparation*. 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.

A list of recommended reading and homework assignments for students is included with these resources. You may wish to print and distribute it to students at or before the first review session. Students will optimize their exam preparation efforts if they do the relevant reading and practice problems in advance of each classroom review session.

Components

For each chapter you will find the following resources:

- *A detailed outline overview of the topic.* This outline matches the chapter outline in *Fundamentals of Engineering FE/EIT Exam Preparation*, for consistency with your students' reading and study of the main text.
- *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 which seem to give students particular difficulty. The lecture outline and notes are also included in a PowerPoint file of problems and solutions for in-class discussion.
- *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, 15 distinct review sessions will be required. If time constraints preclude offering 15 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 strength of materials.
- An overview of the FE/EIT exam and/or ethics topics might reasonably be left to the students' independent review.
- Review of biology topics can be omitted for students planning to take one of the discipline-specific afternoon options of the FE/EIT exam, rather than the general afternoon option.

Additional Resources

If you would like to add more problems and solutions to your review sessions and/or your students' resources, Kaplan AEC Education publishes *Exam Files*, a collection of actual exam questions from the files of professors at institutions around the country. For more information, contact your sales rep or visit our website at www.kaplanaecengineering.com.

Exam Files are available on the following topics:

Calculus I	Materials Science
Calculus II	Mechanics of Materials
Calculus III	Organic Chemistry
Circuit Analysis	Physics I—Mechanics
College Algebra	Physics II—Heat, Light & Sound
Differential Equations	Physics III—Electricity & Magnetism
Dynamics	Probability & Statistics
Fluid Mechanics	Statics
Linear Algebra	Thermodynamics

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Amanie N. Abdelmessih, PhD
Saint Martin's University

Stephen A. Batzer, PhD, PE

M. Asghar Bhatti, PhD, PE
University of Iowa

Bruce DeVantier, PhD, PE
Southern Illinois University at Carbondale

Johannes Gessler, PhD, PE
Colorado State University (emeritus)

Candace Christy Hickey, PE

Thomas Horan, PE
Rochester Institute of Technology

Paul Kauffmann, PhD, PE
East Carolina University

Phil Lunsford, PhD, PE
East Carolina University

Ronald B. McPherson, PhD, PE
New Mexico State University (retired)

Gerald J. Micklow, PhD, PE
University of North Carolina at Charlotte
East Carolina University

George Piper, PhD, PE
U.S. Naval Academy