

## **Mastering Engineering Spotlight Video**

### **TRANSCRIPT**

Designed for engineering students and instructors. This online homework and assessment tool supports students' mastery of the skills they'll need for a successful career in engineering. Created to emulate the instructor's office hours environment, Mastering Engineering helps students succeed by providing immediate feedback and personalized help as they work. This builds their confidence and ensures they've mastered the content. The key benefit of Mastering Engineering for students is that it helps them succeed in the course by providing them immediate feedback and personalized help as they work through the problems.

And because Mastering includes a complete e-text of the title you've adopted, it saves students money compared to traditional print options. For instructors like you, the key benefit of Mastering Engineering is that it saves you time. Most of the homework problems are auto graded and the results are fed right into your learning management systems gradebook. Mastering also gives you a variety of assignable content types to choose from, including tutorial homework problems, quiz questions, vector drawing tools and more.

For instructors, it can be time consuming to explain basic errors to students during office hours. For students, it can be hard to understand what you're doing wrong if you only get an error message without additional feedback. That's why Mastering Engineering includes tutorial homework problems with wrong answers. Specific feedback tutorials guide students through engineering concepts using multi-step problems that provide feedback specific to their errors and optional hints that break down the problems into smaller steps.

Mastering Engineering responds to a wide variety of common wrong answers that students enter at any step of a tutorial homework problem with immediate feedback specific to their error. For more help, students can link back to the relevant page in the e-text. After a student completes the tutorial homework problems, optional adaptive follow ups provide additional individualized practice. Adaptive follow ups are targeted problem sets that address gaps in understanding that have been identified in the original homework assignment.

This practice of repeatedly presenting concepts over spaced intervals helps students understand and retain information. These are available for select titles and assignable for credit or extra practice. Mastering Engineering enables students to draw free body diagrams, an important step in solving mechanics problems and a necessary skill for students to develop. These diagrams are a simple abstraction of the forces acting on an object, but they often present a conceptual challenge for students.

Mastering Engineering also lets students practice in an interactive environment using graphical answer types, enabling students to practice their problem solving skills by drawing shear and bending moment diagrams and the Moore Circle method. The mastering gradebook records all scores for automatically graded assignments and gives you insight into student and class

performance. Struggling students and challenging assignments are highlighted in red, giving you an at a glance view of potential hurdles in the course.

In addition, instructors can better evaluate student understanding because all problems are tagged to specific learning outcomes.

Mastering Engineering content has been tagged to A-BET learning outcomes, A, E, and K. Instructors are also able to add their own learning outcomes.

Both students and instructors can benefit from the relevant feedback and timely data provided by Mastering Engineering. Students solidify their knowledge through application and targeted guidance, while instructors hone their teaching practice by leveraging real-time analytics.

Contact your Pearson representative to obtain access to Mastering Engineering and start experiencing the power of this platform.