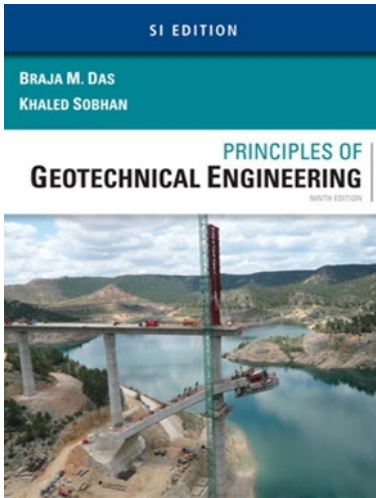


MindTap Quick Start Guide



Principles of Geotechnical Engineering SI Edition, 9th Edition
 Braja M. Das, Khaled Sobhan

Provide a valuable overview of soil properties and mechanics together with coverage of field practices and basic engineering procedures with Das and Sobhan, PRINCIPLES OF GEOTECHNICAL ENGINEERING, SI EDITION, 9E. This market-leading introduction to geotechnical engineering is ideal for the foundational course taken by most civil engineering students. This book provides the important background knowledge students need to support study in later design-oriented courses and in professional practice. The authors ensure a practical and application-oriented approach to the subject by incorporating a wealth of comprehensive discussions and detailed explanations. Find more figures and worked-out problems than any other book for the course to help ensure student understanding.

3 Key Features

Activity	Where to find it – an example	What is it	Why it matters
Algorithmic Problem Sets	<ol style="list-style-type: none"> Chapter 2: Origin of Soil and Grain Size Chapter 2 Problem Set Click on Start Assignment Now to begin 	Algorithmically-generated problem sets provide opportunities for practice. Student solutions are automatically graded, and detailed solutions are provided for incorrect answers.	These additional problem sets maximize students' opportunities to practice and detailed solutions provide coaching.
Videos	<ol style="list-style-type: none"> Chapter 4: Plasticity and Structure of Soil Chapter 4 Videos Atterberg Limits – Liquid Limit <p><i>See it in the Cengage Mobile app</i></p>	Videos illustrating engineering concepts and real-world applications can be found in the learning path of relevant chapters of that section, allowing for quick access to video content.	Videos serve to reinforce what is introduced in the readings. With the addition of the video content, the student is not just reading – he or she is also watching, listening, and thinking about how abstract engineering concepts inform real-world practice.
Animations	<ol style="list-style-type: none"> Chapter 13: Lateral Earth Pressure: At-Rest, Rankine, and Coulomb Chapter 13 Videos Counterfort Retaining Wall <p><i>See it in the Cengage Mobile app</i></p>	Graphic animation videos demonstrate some of the concepts presented throughout the chapter.	Animations visually represent concepts, improving understanding, especially for visual learners.

Das/Sobhan, *Principles of Geotechnical Engineering, 9e*

MindTap Asset Description

Activity	How many?	What is it?	Seat time?	Why it matters?
eBook Chapter	18	The MindTap Reader contains all content from the printed text. MindTap Reader also allows students to make notes and highlights in-text, (which are automatically captured and hyperlinked in the StudyHub app), view notes and content added by the instructor, and even have the content read aloud to them.	45-60 Minutes	Readings provide the foundation of knowledge needed to successfully complete quizzes, problem sets, and in-class work, setting your students up for success.
Quiz (CNOW)	17 (one per chapter)	Automatically graded quizzes assess understanding of the chapter. They include feedback for correct and incorrect answers, and explain where to find more information in the text by linking a specific section.	Varies by student	Measure how well the student mastered the material after completing each MindTap chapter. Helps the student study more efficiently by identifying gaps in their knowledge and pointing to the relevant portion of the text.
Drop-box assignment (practice)(CNOW)	17	Students can upload and submit practice assignments via a drop box integrated within MindTap.	Varies by student	Provide opportunities for practice. This feature enables students to submit papers, reflections and other kinds of written materials as suggested or required by the instructor.

Videos	46	Videos illustrating engineering concepts and real-world applications can be found in the learning path of relevant chapters of that section, allowing for quick access to video content.	00:18 -11 Minutes	Videos serve to reinforce what is introduced in the readings. With the addition of the video content, the student is not just reading – he or she is also watching, listening, and thinking about how abstract engineering concepts inform real-world practice.
Web Links	2	Internet links illustrating engineering concepts and real-world applications can be found in the learning path of relevant chapters.	10 minutes	The links serve to reinforce what is introduced in the readings, but also energize and excite students by seeing contemporary engineering applications.
Animations	8	Graphic animation videos demonstrate some of the concepts presented throughout the chapter.	18 seconds – 9 minutes	Animations visually represent concepts, improving understanding, especially for visual learners.
Problem Sets	18 (one per chapter)	Algorithmically-generated problem sets provide opportunities for practice. Student solutions are automatically graded, and detailed solutions are provided for incorrect answers.	Varies by student	These additional problem sets maximize students' opportunities to practice and detailed solutions provide coaching.
Flashcards	242	Flashcards that help students learn definitions of core concepts and key terms. Students can also create and add their own	Varies by student	Self-testing via flashcards (not for grades) is validated by robust

		cards to the stack.		research. The act of calling information to mind strengthens that knowledge and aids in future retrieval making flashcards an important learning tool.
Reflective Questions	18 (One set per chapter)	Short structured activities every few chapters. Questions ask students what they did to prepare for quizzes or problem sets, where they made errors, and what they can do differently next time. The answers also help instructors understand where students need more help.	Varies by student	Research has found these type of “wrapper” questions improve student learning. They help students focus on how they study and the relative effectiveness of those study habits.

Chapter	MindTap Assignments
Chapter 1: Geotechnical Engineering -- A Historical Perspective.	Chapter reading Videos and links Quiz Reflective Questions Drop Box
Chapter 2: Origins of Soil and Grain Size.	Chapter reading Videos Quiz Problem set Reflective Questions Drop Box
Chapter 3: Weight-Volume Relationships.	Chapter reading Quiz Problem set Reflective Questions Drop Box
Chapter 4: Plasticity and Structure of Soil.	Chapter reading Videos Quiz Problem set Reflective Questions Drop Box
Chapter 5: Classification of Soil.	Chapter reading Videos Quiz Problem set Reflective Questions Drop Box
Chapter 6: Soil Compaction.	Chapter reading Videos Quiz Problem set Reflective Questions Drop Box
Chapter 7: Permeability.	Chapter reading Videos Quiz Problem set

	<p>Reflective Questions Drop Box</p>
Chapter 8: Seepage.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
Chapter 9: <i>In Situ</i> Stresses.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
Chapter 10: Stresses in a Soil Mass.	<p>Chapter reading Quiz Problem set Reflective Questions Drop Box</p>
Chapter 11: Compressibility of Soil.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
Chapter 12: Shear Strength of Soil.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
Chapter 13: Lateral Earth Pressure: At-Rest, Rankine, and Coulomb.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
Chapter 14: Lateral Earth Pressure: Curved Failure Surface.	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>

<p>Chapter 15: Slope Stability.</p>	<p>Chapter reading Videos and links Quiz Problem set Reflective Questions Drop Box</p>
<p>Chapter 16: Soil-Bearing Capacity for Shallow Foundations.</p>	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
<p>Chapter 17: Subsoil Exploration.</p>	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>
<p>Chapter 18: An Introduction to Geosynthetics.</p>	<p>Chapter reading Videos Quiz Problem set Reflective Questions Drop Box</p>