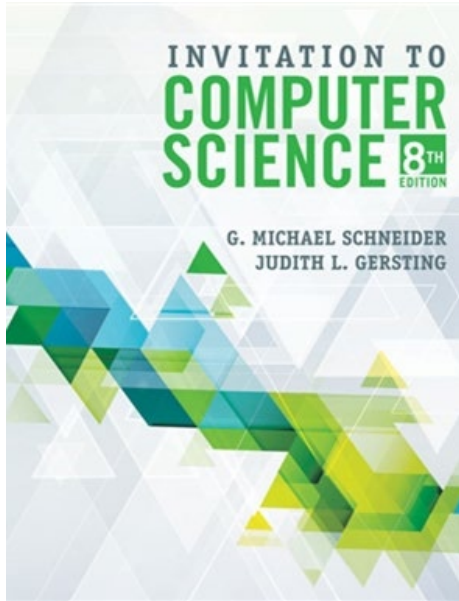


MindTap Quick Start Guide



Invitation to Computer Science
G. Michael Schneider, Judith Gersting

Offer a contemporary overview of computer science with Schneider/Gersting's best-selling INVITATION TO COMPUTER SCIENCE, 8E. This flexible, non-language-specific text uses an algorithm-centered approach to provide a foundation in computing. Learning objectives and a clear hierarchy help introduce algorithms, hardware, virtual machines, software development, applications of computing, and social issues. Updated exercises and practice problems challenge students to analyze, evaluate, and approach problems creatively. Special interest boxes and timely content highlight topics such as privacy, drones, cloud computing, and net neutrality. Optional online modules for C++, Java, Python, C#, and Ada integrate seamlessly for the flexibility to teach a specific programming language

3 Key Features

Activity	Where to find it – an example	What is it	Why it matters
Lab Experiences	<ol style="list-style-type: none"> 1. Level 1: The Algorithmic Foundations of Computer Science 2. Unit 3: The Efficiency of Algorithms 3. Unit 3 Lab Experience 4. Lab Experience 4: Sort Animators <p><i>See it in the Cengage Mobile app</i></p>	<p>Lab Experiences Laboratory Experiences and accompanying software are now available directly in the MindTap.</p>	Laboratory Experiences give students an opportunity to get hands-on practice with the concepts in each module.
Language Modules	<ol style="list-style-type: none"> 1. Level 4: Introduction 2. Unit 9: Introduction to High-Level Language Programming 3. Unit 9 Language Modules 	<p>Language Modules Five Language Modules (directly following Unit 9) are available as downloadable PDF files. Modules are available for Java, C++, C#, Python, and Ada.</p>	Language modules allow students to experiment with actual programming languages.
Download your Lab Files	<ol style="list-style-type: none"> 1. Getting Started with MindTap Video Series 2. Download Your Lab Manual Files 3. Click on Download Your Lab Manual Files hyperlink (downloads zip file) 	<p>Download your Lab Files Students can easily download all the starting code files needed to complete the work in the Laboratory Manual.</p>	Downloading files at the start of the course will ensure that students have everything they need before beginning the unit readings and assignments.

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Invitation to Computer Science, Seventh Edition Schneider/Gersting

Learning Path Activity	How many?	What is it?	Why it matters?	Seat time?
Welcome to Your Course	1	This is a brief discussion of the topics that will be covered in the units of this MindTap.	Students will gain a clear understanding of the course objectives and the knowledge they will gain by the end of the course.	5 minutes
Getting Started with MindTap	1	This video provides an overview of the MindTap platform.	Students will learn how to navigate the MindTap course in order to get maximum benefit.	5 minutes
Download Your Lab Manual Files	1	Students can easily download all the starting code files needed to complete the work in the Laboratory Manual.	Downloading files at the start of the course will ensure that students have everything they need before beginning the unit readings and assignments.	5 minutes
Unit Readings	17	Online textbook containing the full content of the printed text.	Text with rich examples and illustrations increases student interest in and learning of computer science concepts.	45 minutes

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Laboratory Manual	20	Laboratory Experiences and accompanying software are now available directly in the MindTap.	Laboratory Experiences give students an opportunity to get hands-on practice with the concepts in each module.	30 minutes
Language Modules	5	Five Language Modules (directly following Unit 9) are available as downloadable PDF files. Modules are available for Java, C++, C#, Python, and Ada.	Language modules allow students to experiment with actual programming languages.	30 minutes
Programming Labs	5	Brief programming labs that accompany the language modules give students an introduction to programming skills.	Labs for Python, C++, and Java give students an opportunity to get hands-on programming experience with automatic feedback. The labs are designed for a beginning student.	15 minutes
Study	17	<p>The Study section includes the following elements:</p> <p>Review: review key concepts from the unit with this slideshow.</p> <p>Reinforce: interactive flashcards provide a chance for students to practice for quizzes</p> <p>Practice: crosswords for each unit are a fun</p>	This section provides a variety of ways for students to absorb the new concepts and terminology introduced in the unit.	30 minutes

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		way to test knowledge of unit vocabulary		
Test	17	Multiple choice questions that test students on terminology and key concepts.	Prepares students to take exams by reviewing chapter material and applying it to real-world situations.	15 minutes

Topic/Chapter	Assignments	Points
Unit 1 An Introduction to Computer Science	Unit 1 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 2 Algorithm Discovery and Design	Unit 2 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 3 The Efficiency of Algorithms	Unit 3 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 4 The Building Blocks: Binary	Unit 4 Reading and Videos Laboratory Experiences	40 20

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Numbers, Boolean Logic, and Gates	Study Tools	15
	Unit Test	25
Unit 5 Computer Systems Organization	Unit 5 Reading and Videos	40
	Laboratory Experiences	20
	Study Tools	15
	Unit Test	25
Unit 6 An Introduction to Systems Software and Virtual Machines	Unit 6 Reading and Videos	40
	Laboratory Experiences	20
	Study Tools	15
	Unit Test	25
Unit 7 Computer Networks and Cloud Computing	Unit 7 Reading and Videos	40
	Laboratory Experiences	20
	Study Tools	15
	Unit Test	25
Unit 8 Information Security	Unit 8 Reading and Videos	40
	Laboratory Experiences	20
	Study Tools	15
	Unit Test	25
Unit 9 Introduction to High-Level Language Programming	Unit 9 Reading and Videos	20
	Laboratory Experiences	10
	Language Modules	15
	Language Labs	10
	Study Tools	20
	Unit Test	25

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Unit 10 The Tower of Babel	Unit 10 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 11 Compilers and Language Translation	Unit 11 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 12 Models of Computation	Unit 12 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 13 Simulation and Modeling	Unit 13 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 14 Electronic Commerce, Databases, and Personal Privacy	Unit 14 Reading and Videos Laboratory Experiences Study Tools Unit Test	40 20 15 25
Unit 15: Artificial Intelligence	Unit 15 Reading and Videos Study Tools Unit Test	40 35 25


 The logo for MindTap, featuring the word "MindTap" in a large, orange, sans-serif font with a registered trademark symbol (®) to the upper right. The logo is set against a white background that is framed by a thin, black, curved line that arches over the top of the page.

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Unit 16: Computer Graphics and Entertainment: Movies, Games, and Virtual Communities	Unit 16 Reading and Videos	40
	Study Tools	35
	Unit Test	25
Unit 17: Making Decisions about Computers, Information, and Society	Unit 17 Reading and Videos	40
	Laboratory Experiences	20
	Study Tools	15
	Unit Test	25
	Total	1700