2 Steps for Hands-on Simulations in Career and Technical Education

National Geographic Learning, a part of Cengage offers online solutions with interactive eBooks, auto-graded assessment, videos and hands-on simulations aligned to industry standards. Click to Watch this video for an overview of the types of simulations that are available across the Career Clusters.

Step 1: CHOOSE
- Click on a Career Cluster in the below table of contents to learn about available simulations that relate to your course(s).
- Select the course(s) title to learn more about that eBook.

Step 2: REQUEST
- Send an email to: lausdnglsupport@cengage.com with the title and ISBN of the course(s) you would like access to. You will receive instructions to access your course shortly.

FINANCE (click here)
- Century21 Accounting Simulations
- Personal Finance

INFORMATION TECHNOLOGY (click here)
- Computer Forensics
- Digital Literacy
- Microsoft Office 2016 & 2019 (MOS Certifications)
- Networking (Network+ Certification)
- PC Repair (A+ Hardware and Software Certifications)
- Programming Languages (C++, Python & Java)
- Security (Security+ Certification)
- Web Development/Programming

ARCHITECTURE & CONSTRUCTION (click here)
- Residential Construction Code Simulations
- Electrical & Wiring Simulations
- HVAC Simulations
- Welding Simulations

HEALTH SCIENCE (click here)
- Anatomy & Physiology
- Dental Assisting
- Foundations of Health Care
- Medical Assisting
- Medical Billing & Coding
- Medical Terminology
- Nursing Assisting
- Pharmacy Technician
- Sports Medicine
- Surgical Technician

STEM (click here)
- Robotics Simulations

TRANSPORTATION (click here)
- Automotive Theory Simulations
- Diesel Theory Simulations

Don’t see your course area above?
Contact your Sales Consultant to see what online courses and activities are available. Ngl.cengage.com/repfinder
Century21 Accounting Simulations

- Students gain real-world practice using automated accounting software for an accounting cycle.
- Source Documents included online
- Click-stream reporting shows all steps students took to complete a module and offers PLAYBACK recording of students completing the simulation.

INCLUDED SIMULATIONS:
- Simulation 1: Red Carpet Events
- Simulation 2: Authentic Threads
- Simulation 3: Digital Diversions

Ask to see one of the following MindTap courses:
- Century21 Accounting: Multicolumn Journal, 11th with all 3 sims: 9780357032336
- Century21 Accounting: General Journal, 11th with all 3 sims: 9780357028032

Personal Finance

- Personal Finance simulations can be used to supplement any Personal Finance, Business, or Life Skills course.
- Students practice budgeting, financial planning, recording and depositing checks, reconciling bank statements, rent and mortgage payments, using credit and debit cards, investing for retirement and more!

Ask to see one of the following:
- Family Financial Management: 9780357042816
- On Your Own Personal Finance Simulation: 9780357042656
INFORMATION TECHNOLOGY Simulations

Computer Forensics, IT Security, PC Repair & Networking

- Live, Virtual Machine Labs help students practice real-world technical troubleshooting by connecting to live IT systems in real-time. Students practice, explore and try different solutions to play in a safe sandbox and learn by doing.
- Students connect to real machines via the cloud and follow step-by-step user guides with screenshots to complete tasks aligned to CompTIA certification skills.

Ask to see the following MindTaps:

- **CompTIA A+ Guide to IT Technical Support, 10e (PC Repair):** 9780357108352
- **Network+ Guide to Networks, 8e:** 9780357035184
- **Guide to Networking Essentials, 8e:** 9780357134412
- **CompTIA Security+ Guide to Network Security Fundamentals, 6e:** 9781337780834
- **Guide to Computer Forensics and Investigations, 6e:** 9780357502686

Digital Literacy

- SAM (Skills Assessment Manager) skills trainings include video-based lessons on emerging concepts in digital literacy.
- Critical Thinking Challenges offer branching real-world scenarios where students must make technology-based decisions for work, life and school.

Ask to see the following MindTaps:

- **Technology for Success: Computer Concepts, 1e:** 9780357124925
- **Technology for Success and Shelly Cashman Series Microsoft Office 365 & Office 2019:** 9780357119181
- **Technology for Success and Illustrated Series Microsoft Office 365 & Office 2019:** 9780357124925
Microsoft Office 2016 & 2019 (MOS Certifications)

- Projects allow students to submit projects for an automated grade with reporting that links to remediation and uses track changes to mark up the document.
- SAM MOS Exams simulate the MOS-test taking experience for Associate and Expert level exams.

Ask to see the following MindTaps:

- Technology for Success and Shelly Cashman Series Microsoft Office 365 & Office 2019: 9780357119181
- Technology for Success and Illustrated Series Microsoft Office 365 & Office 2019: 9780357124925

Programming Languages & Web Development

(C++, Python, Java, HTML, CSS & Javascript)

- Auto-graded coding labs offer an IDE (Integrated Development Environment) for students to practice coding with automatic feedback and detailed reporting with links to remediation for missed coding concepts.
- Coding snippets offer a sandbox-style experience for students to play around with new programming concepts and view the output.

Ask to see the following MindTaps:

- Java Programming, 9e: 97813377780391
- Programming Logic & Design, Comprehensive, 9e: 9780357430637
- Fundamentals of Python: First Programs, 2e:
- C++ Programming: From Problem Analysis to Program Design, 8e:
- Invitation to Computer Science, 8e (AP Computer Science Principles): 9780357611937
- Responsive Web Design with HTML 5 & CSS, 9e: 9780357423899
ARCHITECTURE & CONSTRUCTION Simulations

Residential Construction Code Simulations

- Tests student knowledge of construction codes as they virtually navigate a residential construction site and inspect structural components for compliance with the NEC and IBC codes.
- Covers every inspection phase of new construction.

Ask to see one of the following MindTap courses:

- Residential Construction Academy: Basic Principles for Construction, 5th: 9780357140215
- Residential Construction Academy: Carpentry, 5th: 9780357127797
- Construction Materials, Methods and Techniques, 4th: 9781305635265
- Residential Construction Academy: House Wiring, 5th: 9781337902632
- Electrical Wiring Residential, 20th: 9780357028032

Electrical & Wiring Simulations

- Students view electricity as it flows through wiring diagrams, manipulate it, and apply electrical concepts to residential wiring circuits as they wire an entire home from start to finish.
- Dynamic feedback reports give learners insight into their performance and skill development.

Ask to see one of the following MindTap courses:

- Residential Construction Academy: House Wiring, 5th: 9781337902632
- Electrical Wiring Residential, 20th: 9780357028032
- Delmar’s Standard Textbook of Electricity, 7th: 9780357135952
HVAC Simulations

- This best-selling simulation includes new equipment, videos, and easy troubleshooting charts that students use as they build troubleshooting and diagnostic skills across seven pieces of HVAC equipment in a lifelike, virtual training environment.
- Now includes 23 Walk-in Commercial Freezer troubleshooting scenarios, plus simulations for Gas and Oil Furnaces, Gas Boilers, Small Commercial AC units, Central AC units and Heat Pumps.

Ask to see one of the following MindTap courses:

- Refrigeration & Air Conditioning Technology, 9th: 9780357435205
- Electricity for Refrigeration, Heating, and Air Conditioning, 10th: 9781337902540

Welding Simulations

- Welding Simulations offer three module activities that focus on preparation of a weld from evaluation of blueprints to the proper setup and safety procedures for welding equipment.
- A 3D inspection of completed welds concludes the activity to provide remediation and promote analytical skills.

Ask to see the following MindTap courses:

- Welding: Principles and Applications, 9th: 9780357377772

EXPLORE ALL CONSTRUCTION SIMULATIONS (CLICK HERE)
This 3-D simulation includes a fully interactive robotic arm that is controlled by a highly realistic teach pendant. Set in an industrial life-like factory setting, the simulation has a variety of engaging practical applications that provide real-world experience in a safe, controlled environment.

Ask to see the following MindTap courses:

- *Industrial Robotics, 1e*: 9781337902533
- *Basic Robotics, 1e*: 9781305858855

EXPLORE ALL CONSTRUCTION SIMULATIONS (CLICK HERE)
TRANSPORTATION Simulations

Automotive Theory Simulations
- Interactive simulations focus on applying fundamental concepts and theories to a virtual automotive bay.
- Provide virtual workplace experience and master common tasks, including use of tools and skills required for the 8 ASE areas.
- 72 unique simulation modules.

Ask to see the following MindTap courses:
- Auto Body Repair, 7th: 9780357139882
- Automotive Service: Inspection, Maintenance and Repair, 6th: 9781337794121
- Automotive Technology: A Systems Approach, 7th: 9781337794398
- Today's Technician: Basic Automotive Service & Systems, 6th: 9781337795784

Diesel Theory Simulations
- Students get hands-on with virtual simulations that help them master basic electrical concepts and theories that they will encounter in the workforce.
- 16 electrical Medium/Heavy Duty Truck Theory Simulations
- Built-in analytics and progress reports for teachers

Ask to see the following MindTap courses:
- Medium/Heavy Duty Truck Engines, Fuel & Computerized Management Systems, 6th: 9780357358634
- Heavy Duty Truck Systems, 7th: 9781337787215

EXPLORE ALL TRANSPORTATION SIMULATIONS (CLICK HERE)
Anatomy & Physiology

- A&P Learning Labs are organized by body system to provide video lecture, and interactive simulations where students label diagrams, interact with patients, take X-Rays, and get feedback from mentors.

Ask to see the following MindTap courses:

- **DHO Health Science, Updated, 8e**: 9781305654969
- **Body Structures and Functions, Updated, 13e**: 9780357022375

Dental Assisting

- Dental Assisting Learning Labs offer hands-on experience with key skills in a virtual environment like: tooth morphology labeling, infection control, dental chart, positioning the HVE, radiography and more.
- Dental Tray Setup Simulations allow students to practice ordering and sorting of equipment and ability to anticipate the dentist’s needs.

Ask to see the following MindTap course:

- **Dental Assisting: A Comprehensive Approach, 5e**: 9781337798563

**EXPLORE ALL HEALTH CARE SIMULATIONS (CLICK HERE)**
Foundations of Health Care

• Career Exploration Learning lab introduces students to Health Care careers using a first-person series of scenes that follows an injured patient from the accident scene to home care, highlighting 31 primary careers.
• Students answer questions to learn from a library of over 70 health careers with video interviews and up-to-date job information.
• Critical Thinking and Career Success Learning Labs offer video-based interactive scenarios that mimic real-world dilemmas students are likely to encounter on the job.

Ask to see the following MindTap courses:

• DHO Health Science, Updated, 8e: 9781305654969
• Introduction to Health Care, 5e: 9780357128053

Medical Assisting

• Medical Assisting Learning Labs and Video series offer interactive activities and challenging scenarios from law and ethics to facilities management and everything in between. Students work through all clinical and administrative tasks with clinic and hospital video scenarios, EHR resources, telephone skills and more.
• MOSS 3.0 (Medical Office Software Simulation) offers real-world practice with 125 Electronic Medical Records and Practice Management activities for clinical and administrative skills. These experiences are auto-graded at every level with step-by-step action reports and video-recordings of student work.

Ask to see the following MindTap courses:

• MindTap for MOSS 3.0: 9780357140185
• Blesi, Medical Assisting: Administrative & Clinical Competencies, Updated, 8e: 9781337909891
• Lindh, Comprehensive Medical Assisting: Administrative and Clinical Competencies, 6e: 9780357140192
• French, Administrative Medical Assisting, 8e: 9781305859319
• Heller, Clinical Medical Assisting: A Professional, Field Smart Approach to the Workplace, 2e: 9781305634879
Medical Billing & Coding

- Medical Coding Trainer provides over 240 cases for coding practice using real-world, scrubbed patient records and reports on accuracy and speed.
- Learning labs simulate a real-world physician’s office environment to practice decision making, critical thinking, and problem solving skills via real-world situations.
- SimClaim software helps students get acquainted with the CMS-1500 and UB 04 Forms.

Ask to see the following MindTap courses:

- **3-2-1 Code It! 2020**: 9780357362754
- **Understanding Health Insurance: A Guide to Billing and Reimbursement, 14e**: 9780357043615

Medical Terminology

- Medical Terminology Learning Labs move through body systems and diagnostic procedures and pharmacology terms to help students become effective communicators in the medical field, including video-based modules, blackboard word-part exercises, Patient X-ray and labeling.
- MindTap Pronounce uses the same voice-recognition technology as Siri in your iPhone to help student practice and auto-grade verbal pronunciation of Medical Terms in each chapter.

Ask to see the following MindTap courses:

- **DHO Health Science, Updated, 8e**: 9781305654969
- **Medical Terminology for Health Professions, 8e**: 9781305634473

Nursing Assisting

Many of the above simulation types are available in Nursing courses.

Ask to see the following MindTap courses:

- **Nursing Assistant: A Nursing Process Approach, 12e**: 9780357372111
- **Assisting in Long-Term Care, 7e**: 9781337796408
Pharmacy Technician

- Virtual Externship Learning Lab offers virtual WBL as students work in video-based modules to communicate with customers, work on prescriptions, prepare labels, handle inventory and work with co-workers.
- Medication Safety and Inventory Management Learning Labs also help students practice procedural and critical-thinking skills required for the job.

Ask to see the following MindTap course:
- *The Pharmacy Technician: A Comprehensive Approach, 4e*: 9780357372005

Sports Medicine

Sports Medicine offers videos, auto-graded assessment and study tools in addition to the full eBook.

Ask to see the following MindTap courses:
- *Introduction to Sports Medicine and Athletic Training, 3e*: 9781337790475
- *Sports Medicine Essentials: Core Concepts in Athletic Training & Fitness Instruction, 3e*: 9781305664975

Surgical Technician

- Mayo Stand Setup Simulations offer practice with ordering and sorting equipment on a virtual tray.
- A Surgical Technology Skills video series offers video of many skills required for the job.

Ask to see the following MindTap course:
- *Surgical Technologist – Surgical Technology for the Surgical Technologist: A Positive Care Approach, 5e*: 9781337909228

EXPLORE ALL HEALTH CARE SIMULATIONS (CLICK HERE)