Learning Solutions
From McGraw-Hill Education

Partnering with your Engineering School to deliver world-class solutions to unlock the potential of every learner and connect them to the world of engineering.
About Us

Connecting your students to the world of engineering

A great emphasis is being placed on engineering schools providing their students with high quality teaching and learning solutions, which are both engaging and accessible and help them prepare for the workplace. This includes providing students with access to high quality classroom materials, and reference data that can be used in laboratory and project environments. These learning solutions need to be configurable to the needs of the institution and should provide students with adaptive, personalized content they can work through at their own pace, receiving continuous feedback.

McGraw-Hill Education has been serving the global higher education sector for nearly 130 years and we share and understand your challenges at a deep, research-driven level. As the education space has continued to evolve, so have we. As a result, we can engage students and deliver improved outcomes while providing impactful evidence through powerful analytics at both a student and institution-wide level.

Connect, our digital teaching and learning tool, delivers MHE’s core textbooks using adaptive learning techniques and a sophisticated homework management system to introduce undergraduates, freshmen and sophomores to fundamental concepts and build problem-solving skills in a personalized manner.

AccessEngineering, our engineering reference platform, brings the real world into the classroom and lab, enhancing our industry standard engineering handbooks and upper level textbooks with video instruction, spreadsheet calculators, and data visualization tools.

Together, Connect and AccessEngineering deliver a complete, four-year engineering education solution that prepares students for the complex, problem-solving challenges they’ll face upon entering the workplace.

Because learning changes everything.

Steve Chapman
Portfolio Director: Publisher, Science, Technical and Medical

McGraw-Hill Education has been serving the global higher education sector for nearly 130 years and we share and understand your challenges at a deep, research driven level.”
A 130 Year Journey: From Publishing to Learning Science

1888
Our company was formed in 1888.

1989
McGraw-Hill College Division introduces the first computerized publishing system (PRIMIS) allowing instructors to customize a textbook to match their curriculum.

2011
McGraw-Hill Education launches Connect2 and redefines course development and delivery with Connect2 and Ellevate for English.

2012
We launched AccessEngineering and offered LearnSmart, industry-leading technology, directly to students.

2013
We acquire ALEKS, the personalized learning software company.

2014
McGraw-Hill Education launches the new Connect higher education platform allowing full access through native apps designed for tablet and mobile device users.

2015
We opened a new London headquarters to service the Europe, Middle East, and Africa educational markets.

2016
Sales of digital units in the U.S. higher education market overtake print for the first time in company history.

2017
McGraw-Hill Education launches Connect2 and redefines course development and delivery with Connect2 and Ellevate for English.

We acquired Area 9 and Engrade
We collaborated with StudySync to combine dynamic digital content.

2010
McGraw-Hill Education launches; an all-digital teaching and learning exchange.

SmartBook™, the world’s first adaptive e-book.

1989
We opened a new London headquarters to service the Europe, Middle East, and Africa educational markets.

1988
Our company was formed in 1888.

1888
Our company was formed in 1888.

1989
McGraw-Hill College Division introduces the first computerized publishing system (PRIMIS) allowing instructors to customize a textbook to match their curriculum.

2011
McGraw-Hill Education becomes the first company to provide universal access to its digital content and tools directly from any learning management system at any college or university.

2012
We launched AccessEngineering and offered LearnSmart, industry-leading technology, directly to students.

2013
We acquire ALEKS, the personalized learning software company.

2014
McGraw-Hill Education launches the new Connect higher education platform allowing full access through native apps designed for tablet and mobile device users.

2015
We opened a new London headquarters to service the Europe, Middle East, and Africa educational markets.

2016
Sales of digital units in the U.S. higher education market overtake print for the first time in company history.

2017
McGraw-Hill Education launches Connect2 and redefines course development and delivery with Connect2 and Ellevate for English.

We acquired Area 9 and Engrade
We collaborated with StudySync to combine dynamic digital content.
Our Offer

Our market-leading titles, award-winning authors and robust teaching and learning platforms span the breadth of a typical European Engineering School’s curriculum.

100% Course coverage across all major engineering programs

Access Engineering Research & Reference Learning Tools

700+ Titles
850+ Videos

Foundation Mandatory Courses content coverage
Year 1 Mandatory Courses content coverage
Year 2 Mandatory Courses content coverage
Year 3 Mandatory Courses content coverage
Year 4 Mandatory Courses content coverage

100%
100%
100%
100%
100%

Connect online courses
30+
eBooks
200+
ALEKS Maths Learning & Remediation Tools
Data Visualization, Excel Calculator Tools & Editable Test Banks
Power-Cycle Applets & 2D-3D Animations, Simulation

Our market-leading titles, award-winning authors and robust teaching and learning platforms span the breadth of a typical European Engineering School’s curriculum.
With you every step of the way

We will partner with you to provide end-to-end engagement and support that delivers results.

At McGraw-Hill Education, we know that everything begins once our team meet with you on campus, pair you with the solution that’s right for you and your school, and then agree a solution with you. That’s why our dedicated team of locally-based Academic Consultants plus our Digital Success Consultants and Customer Support Teams are there for you throughout the journey to ensure that you and your students have the best experience possible.

We also have a team of Digital Faculty Consultants across Europe, Middle East and Africa who are a network of passionate educators, dedicated to advancing student learning through educational technologies, resources, and collaboration opportunities. Digital Faculty Consultants are available for peer-on-peer consultation to support you in your journey with us.

% of customers seeing a positive impact from using Connect online courses

- 93% Student performance
- 89% Student engagement
- 67% Class management
- 80% Teaching practice

Source: Voice of Customer Survey 2017 Q4
Providing you with great content for your course

Over 600 engineering titles written by academic researchers and subject matter experts to ensure the materials students use meet the highest academic standards and reflect the most relevant research.

---

Thermodynamics, An Engineering Approach, SI Units, 8/e
Yunus A. Cengel, Michael Boles
ISBN: 9789814595292
Copyright year: 2014
Format: Connect

Mechanics of Materials, SI Units, 7/e
ISBN: 9789814595247
Copyright year: 2015
Format: Connect

Fundamentals of Electric Engineering, 5/e
Charles Alexander, Matthew Sadiku
ISBN: 9781259251320
Copyright year: 2017
Format: Connect

Applied Numerical Methods with MATLAB, 4/e
Steven C. Chapra
ISBN: 9780073397962
Copyright year: 2018
Format: Connect

Fundamentals of Thermal-Fluid Sciences, SI Units, 5/e
Yunus A. Cengel, Robert H. Turner, John M. Cimbala
ISBN: 9789814290953
Copyright year: 2017
Format: Connect

Perry’s Chemical Engineers’ Handbook, 8/e
Don W. Green, Robert H. Perry
ISBN: 9780071834087
Copyright year: 2008
Format: Connect, AccessEngineering

Fluid Mechanics, SI Units, 8/e
Frank M. White
ISBN: 9789814720175
Copyright year: 2016
Format: Connect

Shigley’s Mechanical Engineering Design, SI Units, 10/e
Richard G. Budynas
ISBN: 9789813151000
Copyright year: 2014
Format: Connect

Fluid Mechanics: Fundamentals and Applications, SI Units, 3/e
Yunus A. Cengel, John M. Cimbala
ISBN: 9781259011221
Copyright year: 2013
Format: Connect

Marks’ Standard Handbook for Mechanical Engineers, 12/e
Ali M. Sadegh, William M. Worek
ISBN: 9781259588501
Copyright year: 2018
Format: AccessEngineering

Do you like to refer your students to different texts including your own materials?

McGraw-Hill Create™ is a self-service website enabling you to build your own customised print or digital reader for your students, using McGraw-Hill Education’s comprehensive and cross-disciplinary content, as well as other third-party content and your own materials.

In a few quick clicks you are able to select and organise the content, personalise your reader with a cover and select which format you’d like it to be made available in and then see review a copy for your approval.
We partner with 14,000+ authors and educators in various fields of study.

Awards-winning Authors

**Yunus A. Cengel**

Yunus A. Cengel is Professor Emeritus of Mechanical Engineering at the University of Nevada, Reno. He received his B.S. in Mechanical Engineering from Istanbul Technical University and his M.S. and Ph.D. in Mechanical Engineering from North Carolina State University. His areas of interest are renewable energy, energy efficiency, energy policies, heat transfer enhancement, and engineering education. He served as the Director of the Industrial Assessment Center (IAC) at the University of Nevada, Reno, from 1996 to 2000. He has also served as an advisor for various government organizations and corporations.

He is a registered Professional Engineer in the State of Nevada, is a member of the American Society of Mechanical Engineers (ASME) and the American Society for Engineering Education (ASEE) and recipient of the ASEE Meriam/Wiley Distinguished Author Award for excellence in authorship in 1992 and again in 2000.

**Don W. Green**

Don W. Green is Emeritus Distinguished Professor of Chemical and Petroleum Engineering at The University of Kansas. He holds a B.S. in petroleum engineering from the University of Tulsa, and M.S. and Ph.D. Degrees in chemical engineering from the University of Oklahoma.

He has won numerous teaching awards at The University of Kansas and has also been featured as an outstanding educator in ASEE’s Chemical Engineering Education Journal. He was an SPE Distinguished Lecturer, recipient of the SPE Distinguished Achievement Award for Petroleum Engineering Faculty, and the Improved Oil Recovery (IOR) Pioneer Award and was named an Honorary Member of both SPE (Society of Petroleum Engineers) and AIME (American Institute of Mining and Metallurgical Engineers). He is also a Fellow of the AIChE (American Institute of Chemical Engineers).

**Richard G. Budynas**

Richard G. Budynas is Professor Emeritus of the Kate Gleason College of Engineering at Rochester Institute of Technology. He has over 40 years experience in teaching and practicing mechanical engineering design. He was awarded the BME of Union College, MSME of the University of Rochester, and the Ph.D. of the University of Massachusetts. He is a licensed Professional Engineer in the state of New York.

**Charles K. Alexander**

Charles K. Alexander is Professor of Electrical and Computer Engineering at Cleveland State University. He received his B.S degree from Ohio Northern University and his MS and Ph.D. degrees in Electrical Engineering from Ohio University. He has served as a consultant to numerous corporate and governmental organizations and is involved in research and development projects ranging from solar energy to software engineering. He is a Fellow of the Institute of Electrical and Electronic Engineers, and was IEEE president in 1997.

**William Worek**

William Worek, Ph.D., is Executive Director of Eagle Ford Center for Research, Education and Outreach at Texas A&M University, Kingsville. He is a Fellow of the American Society of Mechanical Engineers and Fellow of the American Society of Heating Refrigerating and Air-Conditioning. He serves on the Editorial Advisory Boards of the International Journal of Heat and Mass Transfer and the International Communications in Heat and Mass Transfer and is currently a member of the Board of Governors of the American Society of Mechanical Engineers.
Since 2010, Connect has helped transform learning for 3.6 million students around the world.

Connect is an online platform integrating ready-made course content with assessments and tools. Using the most established adaptive learning technology in the market, Connect provides each student with a tailored learning journey enabling them to learn at their own pace and in their own way. Real-time assessments help accelerate learning and drive continuous progression. This is proven to help drive up retention rates by 28%, boost grades by 30% and improve the overall learning experience for students and educators.

For course leaders Connect helps to transform education by reducing administration time by around 72%, resulting in 90% more time focused on providing active learning experiences for students. This helps maximise classroom time, boosting productivity of both teachers and students, ultimately driving greater academic success.

From the students’ point of view Connect enables them to self-regulate their learning and to evaluate whether their learning methods are working for them. This gives them a greater sense of responsibility for their learning which seems to improve engagement with the course.”
Carel Oosthuizen, University of Pretoria

Find out more about how you can transform learning with Connect by visiting: mheducation.co.uk/connect
Providing your students with up-to-date content for assignments and revision.

AccessEngineering®

Give students the power of knowledge.

AccessEngineering is a world-leading online resource that enables students and faculty to boost academic success and professional preparation.

The online platform contains a vast range of dynamic resources and multi-disciplinary, regularly updated content covering all the topics across the faculty and department. It includes leading authors, authoritative texts and personalisation tools that allow users to easily organise and annotate critical information for quick and easy access. Ready-to-use curriculum maps, interactive tables and charts, active learning projects and instructional faculty-made videos are all underpinned by a powerful search facility, helping save research and admin time.

Focused on helping students prepare for a successful professional life, AccessEngineering also includes business content and instructional videos to help develop management and process skills, and presentation ability. Available anytime and on any device AccessEngineering also helps to meet student expectations around digital learning.

I would definitely say that we would like to expand AccessEngineering in many other modules in this school. We have seen a real impact of using AccessEngineering to increase the success rate and progression rate of critical modules or modules that students find quite challenging.”

Dr Sabuj Mallik, University of Central Lancashire

For more information about how AccessEngineering could work for you please visit: mheducation.co.uk/accessengineering
Learning Applications

**DataVis**

Teaching students about material properties. Designed by faculty, and available within AccessEngineering, DataVis is an interactive, web-based data visualization tool that transforms the way students learn about material properties. DataVis instantly displays property data in interactive dot-plots and scatterplots across a wide range of materials to enable you and your students to tell a story with the data. Whilst a carefully curated dataset of 200 materials and 65 properties—including cost—provides your students with enough data to learn about material properties without overwhelming them.

To learn more please visit: [accessengineeringlibrary.com/pages/datavis-materials](accessengineeringlibrary.com/pages/datavis-materials)

**ALEKS**

ALEKS is an online maths assessment and learning tool powered by artificial intelligence that can boost academic performance by over 45%. After an initial unique assessment, ALEKS delivers personalized tuition based on topics the student is most ready to learn. This adaptive technique helps provide an enhanced learning experience, resulting in improved grades, greater class engagement and reduced drop-out rates.

“We see ALEKS as an asset in transforming our mathematics program. It offers us as teachers the possibility to concentrate our efforts more and more on what matters most: the application of mathematics in the professional context. We therefore believe in this approach and continue along this path.”

Hans Vrijmoeth, Avans University for Applied Sciences

To learn more please visit: [mheducation.co.uk/aleks](mheducation.co.uk/aleks)

**COSMOS**

Making it easier to use problem sets to create your own assignments. Our Complete Online Solutions Manual Organization System (COSMOS) makes it easier for you use the end-of-chapter problem sets contained within our textbooks to create your own assignments. All of the images and equations are provided straight from the text as editable Word files so you can edit and change the numbers whenever you want to come up with a new set of problems.

To learn more please visit: [mhhe.com/COSMOS](mhhe.com/COSMOS)
I believe AccessEngineering has had a great impact because of its usability and its ease of access and the fact that it covers a lot of subject matter across engineering. So it’s not just primarily mechanical, there’s electronic engineering in there, there’s aerospace, motorsport, automotive and it’s just a nice easy way for, particularly undergraduate students, to find academic material. It’s accessible on mobiles, on tablets, around desktops and I guess students these days will work on a variety of devices. And the thing that I’ve noticed whenever I’ve used it on my ipad or on my phone is that it is pretty navigable on there aswell.

Bob Frost, University of Central Lancashire

With a fast-developing world, it’s amazing how the changes in people’s values, perspectives, and educational needs are growing. Grabbing the attention of students and keeping them focused during the course of a study is a challenging task for educators. Today, digitization has caused people to move towards more digital tools such as cell phones, tablets and computers. These gadgets offer great advantages such as fast-access to information globally, significant time savings, and easy storage of vast amount of information.

Rose-Hulman supplements its entrepreneurial curricula and activities with the entrepreneurial material in AccessEngineering. This exposes students to the complexities of being an entrepreneur. The books, charts, and videos serve as a valuable complement to the traditional in-class instruction. Given that it is difficult to teach every aspect of the entrepreneurial journey, the online material in AccessEngineering provides an expanded array of instructional resources that can be incorporated in the classroom or as supplemental material for both “pitches” and initial business plans. Furthermore, the multimedia elements are invaluable for students who prefer learning from formats other than reading. Just think, with AccessEngineering students can listen on demand to Steve Jobs’s 3-minute presentation on his 7 principles of breakthrough success. This helps when trying to meet the diverse learning needs of our students.

Craig Downing, Rose-Hulman Institute of Technology

I have been teaching Mechanical Engineering courses for over 5 years and always used old-fashioned teaching and assessment methods until 2017. Furthermore, I used similar methods that I was taught and assessed in the mid-1990s. Looking for something new and attractive, I was introduced to McGraw Hill Connect in November 2016 and personally explored this tool for two months extensively. I used Connect for three semesters and we (myself, course assistants and students) are all pleased with the outcomes. Connect offers a rich set of material including e-book, slides, solution manuals, and learn-smart. Using connect for homework, practices, exams and personalized-learning for students caused a significant increase in overall efficiency and time savings. I strongly recommend exploring connect and moving faster than time needs.

Mehmet Arik, Ozyegin University

With a fast-developing world, it’s amazing how the changes in people’s values, perspectives, and educational needs are growing. Grabbing the attention of students and keeping them focused during the course of a study is a challenging task for educators. Today, digitization has caused people to move towards more digital tools such as cell phones, tablets and computers. These gadgets offer great advantages such as fast-access to information globally, significant time savings, and easy storage of vast amount of information.

I have been teaching Mechanical Engineering courses for over 5 years and always used old-fashioned teaching and assessment methods until 2017. Furthermore, I used similar methods that I was taught and assessed in the mid-1990s. Looking for something new and attractive, I was introduced to McGraw Hill Connect in November 2016 and personally explored this tool for two months extensively. I used Connect for three semesters and we (myself, course assistants and students) are all pleased with the outcomes. Connect offers a rich set of material including e-book, slides, solution manuals, and learn-smart. Using connect for homework, practices, exams and personalized-learning for students caused a significant increase in overall efficiency and time savings. I strongly recommend exploring connect and moving faster than time needs.

Mehmet Arik, Ozyegin University
Because learning changes everything.™

At McGraw-Hill Education we believe that learning changes everything. Our teams of learning engineers, content developers and pedagogical experts team with partners across the globe to create solutions that are proven to boost pass rates, increase grades and build engagement for each and every learner while improving outcomes for all.

We believe our contribution to creating a brighter future lies with our deep understanding of how learning happens and how the mind develops. Based on this, we develop methods to make the learning process more effective, and we apply all of this to creating digital and print solutions that empower educators and propel learners on a path toward success.

McGraw-Hill Education
338 Euston Road
London
NW1 3BH
+44 (0) 203 429 3400
mheducation.co.uk/higher-education/engineering