Below is the list of best applications for STEM education as noted by Online Universities, and with selections that work for students of all ages and abilities:

***General (these apps address STEM more generally or act as tools/reference guides for learning).***

* **Mythbusters HD:** Fans of the Mythbusters TV show can get even more myth-busting action with this iPad app, filled with videos, games, and much more.
* **Science Illustrated:** Get access to the great stories in Science Illustrated when you get this app, paired with a subscription to the magazine. Stories range from green tech to biology to anthropology, hitting on just about everything else in between, too.
* **VideoScience:** Dan Menelly, a science teacher at the UN International School, provides the short videos at the center of this app, teaching students about all kinds of scientific concepts.
* **Khan Academy:** Practice math, science, and computer science skills by watching the videos and completing the activities offered through the always-free Khan Academy.
* **Seismograph:** Get a quick lesson in earthquakes by checking out this seismograph application that can help you to measure any vibration, shaking, or movement.
* **iLab: Timer HD:** The ideal accompaniment to any lab work, this timer lets you easily time experiments with accuracy and record your results.
* **Wolfram Alpha:** Wolfram Alpha is the ideal reference tool for problems in mathematics, statistics, physics, chemistry, engineering, astronomy, biology, computer science, and much more.
* **Science Glossary:** Look up the names of famous scientists, scientific terms, and other essential information in this free reference application for iPhone and iPad.
* **PLoS Reader:** Through the PLoS Reader app, learners can access articles from the seven academic journals published by the Public Library of Science.
* **Exploriments:** Exploriments is all about providing students with fun, simulation-based learning units on science topics. Through their apps, students can learn about topics like motion, fluids, electrostatics, force, and electricity.
* **Science 360:** The National Science Foundation provides this app, filled with science and engineering images, videos, and news from around the world.

***Science (download one of these apps to start learning about biology, astronomy, medicine, or physics).***

* **The Ultimate Dinopedia:** The National Geographic Society has put together an incredible dinosaur reference tool in this application, letting paleontological enthusiasts of any age get a look at their favorite reptiles.
* **3D Sun:** Here, you’ll find an app that allows you fascinating access to information about our Sun, with a 3D view, satellite images from NASA, and the latest updates on solar activity.
* **Moon Globe HD:** Explore the surface of the Moon with this amazing app. Interactive features allow users to zoom in, find out the name for lunar features, and more.
* **Frog Dissection:** If a real-life dissection turns your stomach, then try out this digital version instead. It’s just as educational, but without all the frog carnage.
* **Muscle System Pro II:** Gain a better understanding of how the muscles in the body work and how they’re all working together in this great anatomy app.
* **Britannica Kids:** Encyclopedia Britannica has put out a great collection of apps for kids, covering topics like snakes, rainforests, the solar system, volcanoes, and dinosaurs.
* **Molecules:** Get up close and personal with a molecule when you get this application. You can download molecules from the RCSB Protein Data Bank, and use the app to see them from all angles.
* **Simple Physics:** This fun and engaging game will have kids of all ages dying to learn more about the principles of physics, as they solve a wide range of physics-related problems.
* **The Elements:** A Visual Exploration: Elements is perhaps one of the most visually-striking apps available for the iPad. Through it, users can see amazing photos of the elements and get a look at the periodic table that’s truly unique.
* **Pocket Universe:** Virtual Sky Astronomy: With this app, students can ask astronomy questions and get answers, as well as having the ability to track the planets and stars through the night sky.
* **Planets:** This 3D guide to the solar system is the perfect tool for an aspiring astronomer, helping in learning the constellations, planets, and moons.
* **NASA:** NASA provides a wealth of learning tools through its application. Download it to get access to loads of interactive features on the solar system, space exploration, and much more.
* **Buzz Aldrin Portal to Science:** Astronaut Buzz Aldrin helps students of all ages learn more about space exploration, whether to the Moon or to Mars, in this must-see app.
* **3D Brain:** The human brain is an incredibly complex organ, but you can start learning the basics of how it functions with some help from this anatomy-focused application.
* **OnScreen DNA Model:** Adenine, cytosine, guanine, and thymine have never looked better than in this application that lets students (and scientists) see models of DNA in great detail.
* **GeneIndex HD:** Want to know what a certain gene is for? Then get this amazing reference tool, which lists information about every gene in humans, as well as offering news and scholarly articles on the subject.
* **D. Bones:** D. Bones is the perfect way to teach younger learners about the human skeleton, with games, quizzes, and tutorials that make learning fun.

***Technology (these iPad applications can be the perfect accompaniment for a course on web design or computer science).***

* **Computer Science and MIS:** For those who are just starting out in learning about computer science, this application will fill them in on the basics.
* **PHP Cheat Sheet:** High school and college students will appreciate this reference app to help them with PHP programming.
* **FTP on the Go:** Uploading websites and maintaining online information is a whole lot easier with this FTP app that lets you log into a server from anywhere.
* **techBASIC:** Improve your knowledge of the BASIC programming language, by downloading and checking out this application.
* **Textastic:** From HTML to Python, you’ll be able to do all the coding you need for web design courses right from your iPad.

**Engineering (from the professional level all the way down to the elementary level, these fun and practical engineering apps are among the best out there).**

* **Engineering Unit Conversion:** Make it easy to convert between units used in engineering by keeping this app on hand.
* **Mechanical Engineer:** Want to pursue a career as a mechanical engineer? Then download this app. It’s loaded with more than 300 important mechanical engineering formulas and hundreds more conversions.
* **Engineering Professional:** This app expands on the information found in the Mechanical Engineer app, adding formulas for chemical, civil, electrical, environmental, and hydrological engineering.
* **Finger CAD:** You might not have the full function that other CAD programs offer, but this iPad app makes it fun to use your hands to draw everything from houses to bridges to simple geometric figures.
* **TinkerBox:** This application is a great tool for teaching basic engineering concepts, asking students to play games created around physics and engineering problems.
* **NASA Lunar Electric Rover Simulator:** Space enthusiasts young and old will appreciate this application from NASA. It allows users to get an idea of what it’s like to control a lunar rover, offering up a series of missions on the moon to complete.
* **Geared:** Can you figure out the correct combination of gears to get this machine going? This fun and challenging game will steal hours of your time as you try to figure out increasingly more difficult mechanical puzzles.
* **Paper Bridge:** In this educational game, players have to engineer a bridge that will carry vehicles from point A to point B, without collapsing.
* **LEGO 4+:** With this game, users can play with LEGOs without even having them on hand, building trucks, helicopters, and other vehicles to deliver cargo to a given destination, without getting derailed along the way.

 ***Math (practice your math skills using some of these fun math games and learning tools).***

* **Math Ref:** Never wonder about conversions or the correct mathematical formulas again when you carry around this fully-featured reference application.
* **Achiever!:** Teachers can make use of this educational app (it’s designed for schools only) that helps boost student performance in math and reading.
* **Sector 33:** Developed by NASA’s Ames Research Center, this application asks players to use problem solving and math skills to ensure that a series of planes is safely landed at a very busy airport.
* **Apollonius:** This interactive geometry software allows users to make geometric constructions that would normally require a compass, ruler, or other special tools.
* **Motion Math:** Younger learners will get a fun but challenging look at fractions in this app from the Stanford School of Education.
* **Mathstronaut:** Blast off to math mastery with Mathstronaut, an educational game that asks players to complete a variety of math puzzles in order to travel through space.
* **Pop Math:** This incredibly popular math game is fun even for adults, asking players to pair up equations and their solutions at an ever faster pace.
* **Math Ninja:** Ninjas make everything better, even math! This application is a fun way for learners to practice addition, subtraction, multiplication, and division skills as they battle giant tomatoes and cat-bots.

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