High-performance supercomputers, software applications, wearables, and numerous other computing innovations are connecting, improving, and transforming every aspect of our lives. The IEEE Computer Society (CS) is dedicated to the educational development of all computer-minded students at every level, and all professionals at the forefront of this technological revolution.

For young students and educators, TryComputing.org, conceived by the CS, provides K-12 lesson plans, resources, and tools for inspiring interest in and learning about computer technology. Resources include fun and engaging programs on vector graphics, color and data representation, structures, algorithms, networks, and animation. The site also offers career advice for high school graduates and their parents, and a search tool for accredited computing programs in computer science and engineering, information systems, software engineering, and specialty degrees at postsecondary institutions around the world.

For university students, the Computing Sciences Accreditation Board (CSAB), a partnership of the CS and ACM, has developed accreditation criteria for software engineering, computer engineering, information technology, information systems, and computer science. These criteria have been used to accredit more than 300 educational programs in areas such as computer science, information technology, information systems, and computer science. In addition, the CS has jointly participated with ACM on a number of efforts to develop curriculum guidelines to assist in creating high-quality programs in many computing areas. Current efforts include finalizing the computer engineering curricular guidelines, known globally as CE2016, and producing curricular guidelines for information technology (IT2017). Other CS/ACM curricular projects include a follow-up computing overview report (CC2020) as well as the development of curricular guidelines for cybersecurity programs and data science programs.

For academics and industry practitioners, the CS offers a variety of programs, webinars, and courses. In addition, the newly established Quarto (www.computer.org/web/education/quarto-courses), a set of online learning modules users pay to access, include peer-reviewed courses that keep professionals up to date on the latest developments in specialized areas such as big data, cybersecurity, the Internet of Things, and wearables. The CS also established the Guide to the Software Engineering Body of Knowledge (SWEBOK; www.computer.org/web/swebok), which represents most of the software engineering content in exams taken by those seeking to become certified software engineers. In fact, the professional software developer, software engineering, software engineering master, and process master certifications all derive from SWEBOK. Recent additions to the CS’s educational portfolio include competency-based certifications in the areas of cybersecurity, embedded systems, and coding.

As the world experiences unparalleled innovation in computer technology, CS volunteers and staff work diligently to provide a wealth of programs to elevate the skills of those in the computing profession, equipping both students and practitioners to solve real-world problems and meet the challenges of the future.

—Andy Chen and Lori Cameron