26 January 2010

Senator Kirsten Gillibrand
478 Russell Senate Office Building
United States Senate
Washington, DC 20510

Dear Sen. Gillibrand

The IEEE-USA is pleased to support the Engineering Education for an Innovation Economy Act, or E2 bill. By helping and encouraging states to integrate engineering design concepts into their standard K-12 science and math curriculums, this legislation will improve the effectiveness of instruction in these important subjects and introduce far more students to the vital fields of engineering and technology.

As the recent National Academies report Engineering in K-12 Education: Understanding the Status and Improving the Prospects explains, “The available evidence suggests that under certain circumstances, engineering education can boost learning and achievement in science and mathematics. These effects may be more significant for certain populations, particularly underrepresented minority students.” (p. 55)

Currently, many engineering programs are available to primary and secondary students, but these programs are small and available to only a limited number of students who frequently must self-select into them. Successful engineering programs should be made available to all students. This is especially true of our disadvantaged students, who both can gain the most from and are less likely to choose to participate in engineering programs. A nation built on innovation cannot afford to squander innovative minds by restricting programs that teach innovation to only a privileged few students.

The benefits of the E2 bill are not limited to only students who pursue careers in engineering and science. Increased technological, numerological and mathematical literacy is essential for all students in our increasingly tech-oriented world. Instilling in students “engineering habits of the mind,” as phrased by the National Academies, will help prepare all students for a lifetime spent interacting with technology.

IEEE-USA commends your leadership on this issue. Our 210,000 American members – engineers, programmers, and other technology experts – stand ready to help you promote this bill however we can.

Sincerely,

Evelyn H. Hirt, IEEE-USA President
26 January 2010

The Honorable Paul D. Tonko
128 Cannon House Office Building
United States House of Representatives
Washington, DC 20515

Dear Rep. Tonko

The IEEE-USA is pleased to support the *Engineering Education for an Innovation Economy Act*, or E2 bill. By helping and encouraging states to integrate engineering design concepts into their standard K-12 science and math curriculums, this legislation will improve the effectiveness of instruction in these important subjects and introduce far more students to the vital fields of engineering and technology.

As the recent National Academies report *Engineering in K-12 Education: Understanding the Status and Improving the Prospects* explains, “The available evidence suggests that under certain circumstances, engineering education can boost learning and achievement in science and mathematics. These effects may be more significant for certain populations, particularly underrepresented minority students.” (p. 55)

Currently, many engineering programs are available to primary and secondary students, but these programs are small and available to only a limited number of students who frequently must self-select into them. Successful engineering programs should be made available to all students. This is especially true of our disadvantaged students, who both can gain the most from and are less likely to choose to participate in engineering programs. A nation built on innovation cannot afford to squander innovative minds by restricting programs that teach innovation to only a privileged few students.

The benefits of the E2 bill are not limited to only students who pursue careers in engineering and science. Increased technological, numerological and mathematical literacy is essential for all students in our increasingly tech-oriented world. Instilling in students “engineering habits of the mind,” as phrased by the National Academies, will help prepare all students for a lifetime spent interacting with technology.

IEEE-USA commends your leadership on this issue. Our 210,000 American members – engineers, programmers, and other technology experts – stand ready to help you promote this bill however we can.

Sincerely,

Evelyn H. Hirt, IEEE-USA President
26 January 2010

Senator Edward Kaufman
383 Russell Senate Office Building
United States Senate
Washington, DC 20510

Dear Sen. Kaufman

The IEEE-USA is pleased to support the* Engineering Education for an Innovation Economy Act*, or E2 bill. By helping and encouraging states to integrate engineering design concepts into their standard K-12 science and math curriculums, this legislation will improve the effectiveness of instruction in these important subjects and introduce far more students to the vital fields of engineering and technology.

As the recent National Academies report* Engineering in K-12 Education: Understanding the Status and Improving the Prospects* explains, “The available evidence suggests that under certain circumstances, engineering education can boost learning and achievement in science and mathematics. These effects may be more significant for certain populations, particularly underrepresented minority students.” (p. 55)

Currently, many engineering programs are available to primary and secondary students, but these programs are small and available to only a limited number of students who frequently must self-select into them. Successful engineering programs should be made available to all students. This is especially true of our disadvantaged students, who both can gain the most from and are less likely to choose to participate in engineering programs. A nation built on innovation cannot afford to squander innovative minds by restricting programs that teach innovation to only a privileged few students.

The benefits of the E2 bill are not limited to only students who pursue careers in engineering and science. Increased technological, numerological and mathematical literacy is essential for all students in our increasingly tech-oriented world. Instilling in students “engineering habits of the mind,” as phrased by the National Academies, will help prepare all students for a lifetime spent interacting with technology.

IEEE-USA commends your leadership on this issue. Our 210,000 American members – engineers, programmers, and other technology experts – stand ready to help you promote this bill however we can.

Sincerely,

Evelyn H. Hirt, IEEE-USA President