

## Iowa State University's EELI Challenge Statement

1. Provide each engineering student with sufficient elements of biology to enable him/her to choose to learn more and be productive in a world that increasingly needs bio-related solutions. A number of engineering faculty at Iowa State University are already vitally engaged with life scientists in research and graduate education in topics including bioinformatics, computational biology, atomic force microscopy applied to molecular biology, bioeconomy, and biorenewable products, fuels and energy. We must accelerate the integration of these research connections with biology into the learning experiences for all of our undergraduate students.

2. Instill in each engineering student, a deep and attitude changing appreciation for the important effects of globalization on engineering and business practices. We need to aggressively build on our longstanding exchange opportunities for student international work and study, and more recent experience with a very successful course focused on globalization as viewed by a variety of industry and academic leaders, to effectively result in rich student experiences with diverse cultures of the world. The value of diversity in ethnicity in enriching solutions will be made obvious. We are considering revising foreign language requirements for incoming engineering students and for our own undergraduate and graduate students.

3. Prepare engineering students to meet the urgent need for technological innovation and leadership. We envision building compelling student interest in technological innovation and leadership in industry as well as government through new programs.