Abstract: Engineering has been defined as the vocation of guiding nature to produce something needed or desired. A historical review of the evolution of engineering and engineering education leads to the conclusion that sustainability in design and construction requires the engineer to approach nature with imagination and humility. As part of its Engineer of 2020 initiative The National Academy of Engineering in 2001 questioned how engineering education should evolve to prepare the profession for the future. From that work and efforts by the American Society of Civil Engineers it is clear that an educational system that fails to provide engineers with a broad base of learning results in graduates ill-prepared to enter professional practice. The National Academy Engineer of 2020 work and ASCE Policy Statement 465, Academic Prerequisites for Licensure and Professional Practice, echo a call to adopt a new educational model. The new model seeks to strengthen the cognitive ability of engineers and leads them to practices that work in cooperation and harmony with nature for the benefit of society.