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Shortcomings in Engineering Ethical Education

When handed my degree in mechanical engineering, I was not thinking of my newly inherited responsibility to society. This could be due to the lack of emphasis placed on ethics during my undergraduate curriculum. Perhaps a better way to graduate engineering students would be to throw a baby shower, and announce, Congratulations! You're now the proud parent of a society! This seemingly extreme analogy between being an engineer and being a parent is not as far from the truth as most would think. As engineers we are expected to hold paramount the safety, health, and welfare of the public. We are charged with the responsibility to know our limits, conduct ourselves faithfully to our company, client, and the public, and to issue public statements impartially and truthfully. So why don't engineering schools charge their students with the task of being ethically proficient? More alarmingly, why did I have no requirement in engineering ethics during graduate school, but now have more potential to do harm and more responsibilities with my increased abilities? In 1998, a survey was conducted that revealed that 80% of engineering graduates had no ethics-related course requirements. Even in those institutions with ethics-related content, 16%, the courses were not generally engineering ethics but general ethics courses. With such a blatant problem a full assessment of the deficiencies in education was conducted, and then a plan developed that encompasses both the emerging engineers and the engineers who are currently making the decisions that affect society. It is not only important to ensure that future engineers have the proper skills to know whether the exponentially advancing technologies should be developed, but to protect themselves against the current threat of the current engineering community's actions.