

## IMPORTANCE AND IMPACT OF ENGINEERING AND ENVIRONMENTAL PROTECTION STUDY PROGRAMMES IN HEIS

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### ABSTRACT

In today's fast-changing world, the link between engineering and environmental protection is very important for higher education institutions (HEIs). As global issues like climate change, resource loss, and biodiversity decline grow, there is an urgent need for professionals who have both technical skills and environmental awareness. These academic programs help create a skilled workforce that can design solutions focusing on ecological sustainability and promote teamwork, connecting engineering and environmental sciences. Therefore, HEIs should focus on combining engineering with environmental studies, as this approach leads to innovation and social responsibility, which are essential for tackling complicated ecological challenges. This enhances their educational experience and prepares graduates with the viewpoint needed to understand environmental stewardship within engineering. Importantly, these initiatives inspire students to see themselves as positive change-makers who can support sustainable practices in different industries. The value of these study programs goes beyond the classroom; they significantly impact societal perspectives on engineering and environmental ethics. As graduates leave HEIs with a solid grasp of both fields, they can shape policy decisions, lead corporate sustainability efforts, and help communities resist environmental harm. The benefits of this education can create a more informed public ready to tackle environmental challenges, making sure that the push for sustainability continues even after students graduate. Thus, merging engineering and environmental protection disciplines at HEIs is not just an academic task but a crucial commitment to building a sustainable future.

**Keywords:** education, engineering, environmental protection, students, university

### INTRODUCTION

The connection between fields of engineering and caring for the environment is getting more important today due to global issues like climate change and the need for sustainable development. Engineering and Environmental Protection Study Programs aim to give students the skills and knowledge needed to create solutions for environmental problems, while also considering ethical, economic, and social aspects [1]. These programs usually take a multidisciplinary approach, using ideas from natural and applied sciences, social sciences, and engineering principles to build a complete educational system. This mix in the curriculum is key for encouraging creative thinking and flexibility in future engineers who will tackle difficult real-life challenges [2 - 3]. As stated in the ANDROID Disaster Resilience Networks roadmap, including resilience