

M.Sc. in Environmental Biotechnology (JIIT) With an increasing awareness on environmental issues amongst general public, who's genuine concern towards deteriorating environmental quality is pushing research in the domain of environmental biotechnology. Biotechnology involves the use of living systems for developing products for the benefit of mankind. It is a broad area encompassing applications in various fields such as medicine, food, and environment. Environmental biotechnology specifically focuses on the application of biotechnology-based processes for providing solutions to minimize, and ultimately combat environmental damage. Emerging concerns regarding global environmental changes require an urgent necessity to address the issues arising from pollution, change of climate, damage to natural ecosystems and biodiversity and food security. As an example waste production is expected to go up to 2.2 billion tones by 2025 and it is estimated that 3 million people are hospitalized due to chemical poisoning every year (FAO data), arising from contaminated soil and water. The sustainable and eco-friendly nature of Biotechnology-based solutions is a promising alternative for finding cost-effective measures. Micro organisms and plants are being used for bioremediation of environmental pollutants and commercially available technologies have proven to be safe and effective. Phyto-remediation is also emerging as a promising approach. In contrast to available conventional technologies, biotechnology- based strategies for the environment can be very successfully implemented, keeping environmental laws and regulations in mind. The rigorous two-year M.Sc. program in Environmental Biotechnology prepares our students from basics-to-application of existing and emerging biotechnological tools for the process development and reducing or mitigating the impact of environmental pollutants. The program makes available, the avenues for a career in industry, academia, and entrepreneurship, both in public and private sectors