

## Statement of Purpose

With an unwavering passion for sustainable energy solutions and a deep-rooted commitment to environmental stewardship, I **Arpita Avinash Kale**, am writing to express my sincere interest in pursuing the **master's program in Mechanical Engineering: Ruhr University Bochum as well as in Sustainable Energy Systems and Circular Process Engineering**. This will be enhanced by my academic coursework and career goals besides this course will allow me to become involved in the development of new technologies needed in the endeavors of making the earth a better place to live in.

My 10th and 12th were completed in Maharashtra State Board of Secondary and Higher Secondary Education in Pune, INDIA in 2015 and 2017. I continued my course by taking a Diploma in Mechanical Engineering from Maharashtra State Board of Technical Education in the year 2019. Based on the above academic background, I proceeded further and did my Bachelor of Engineering in Mechanical Engineering from Savitribai Phule Pune University where I secured a commendable CGPA of 9.08. Also, I have an IELTS overall band of 6.5 bands.

**Internship and Training Certificates:** During the semester, students intern at such organizations as Exposys Data Lab, where I obtained information about human resource management, as well as Helix Integrated Learning where I focused on Finite Element Analysis using ANSYS. Moreover, the following training certificates have been accomplished to the successful end: Jigs & Fixture Design, AutoCAD 2D and 3D – Advanced level, Basic Hydraulics and Pneumatics, Basic Metrology – up to Intermediate level clearly proving the fact that I have been always inclined to acquire new knowledge for enhancing my talents.

### **Why Germany?**

Germany indeed, has for a long time been ranked as a world leader in engineering and innovations in green technology. Its commitment to research as evidenced by its strong industrial base and superior research facilities make it an excellent environment for higher studies in sustainable energy systems and circular process engineering. Concerning the factors intensifying this picture, the aptitude of Germany towards the integration of renewables The measures and goals towards sustainable development are set for the country, Engaging in my studies in Germany, I will be able to experience first-hand the culture that appreciates sustainability and thrives in adopting modern technologies and practices in the research and industrial sectors.

### **Why Ruhr University Bochum?**

University Ruhr University Bochum can be described as one of the best because it is characterized by excellent academic performance, efficient learning facilities, and substantial emphasis on interdisciplinarity. Through partnership and support for its students, the university provides a sociocultural disposition for learning and with faculty staff among the country's most knowledgeable in their disciplines, the university truly offers the best atmosphere for academic advancement. In addition, practical operations with industry leaders and research institutions as strategic cooperation partners are crucial for Ruhr University Bochum which offers great chance to gain practical experience and apply all the knowledge gained in the classroom.

### **Why This Program?**

Mechanical Engineering: For these reasons, the Master's program in Sustainable Energy Systems and Circular Process Engineering offered by the Ruhr University Bochum is well suited to my academic and career goals. The coverage of subjects like renewable energy technologies, energy efficiency, and closed-loop material cycle within this program reflects that it will prepare me with knowledge and skills to address major issues with the environmental conservation of resources. Moreover, the program's focus on learning from other disciplines and the application of the knowledge in solving practical challenges will allow me to acquire a comprehensive understanding of the connections and interactions between the energy systems, industrial processes, and changes in the environment that will help me turn into an active participant in the shift to a better future.

After completing the Mechanical Engineering: Of course, as an alumni of the Sustainable Energy Systems and Circular Process Engineering program at Ruhr University Bochum, my future goals are: To work towards the creation of sustainable energy solutions and circular process engineering technologies by joining globally renowned companies like; Siemens Energy (as Sustainable Energy Systems Engineer), BASF (as Circular Economy Process Engineer and) or Schneider Electric (as Energy Efficiency Consultant) in order to influence these big companies for the better.

I am confident that my academic achievements, practical experiences, and unwavering dedication to sustainable development make me an ideal candidate for the Mechanical Engineering: Responsible Engineering Systems, especially the programs – Sustainable Energy Systems and Circular Process Engineering at Ruhr University Bochum. This opportunity would not only prepare me with the latest and specific information that is pertinent in this line of work but shall also afford me the chance to be part of the global shift to a more environmentally sustainable world.

I am indeed looking forward to becoming a captain of this great opportunity to study in your prestigious institution and the prospects of the program towards further personal and professional development.

**Thank you for considering my application.**