

## Doctor of Philosophy (PhD)

**Ashish Singh Bhandari**

**Production & Operations Management Area**

**Institute Research Award 2025 and Professor Prakash G. Apte Award 2025 Winner**



**About the awards:** The aim of the Institute Research Award and the Professor Prakash G. Apte Award is to recognize excellence in research work done by Doctoral students at IIM Bangalore. The awards seek to inspire the school's Doctoral students to achieve greater heights in terms of research quality and productivity.

**Ashish's research focus:** Ashish Singh Bhandari, aged 34 years, works as an Assistant Professor at Masters' Union School of Business (MUSB), Gurugram, India. His research interests broadly lie in energy storage, supply disruption, inventory management and optimization. His Doctoral dissertation focuses on the impact of battery energy storage systems (BESS) on electricity generation from both renewable and non-renewable energy sources. The first study from his dissertation explores the use of BESS to exploit arbitrage opportunities in the electricity market through renewable energy sources. The second study from his dissertation focuses on optimizing energy generation costs for non-renewable energy sources via BESS deployment. In this study, he also investigates the effect of BESS deployment by renewable sources on the non-renewable sources while supplying to the single grid. The third study from his dissertation investigates the relative position of BESS between a remote renewable source and a grid.

**IIMB learning experience:** Ashish says it has been a privilege to learn from world-class teachers, excellent researchers and brilliant students at IIMB. "I am thankful to the Institute for a wonderful learning experience and for the valuable connections."

**Other awards received at IIMB:** Ashish is the recipient of the Doctoral Student Research Paper Award 2024.

**Publications:** Ashish has co-authored a paper on using responsive pricing and product variety for demand management through under supply disruption, which was published in the *European Journal of Operational Research* (EJOR) in May 2024. Another research paper co-authored by him on commodity blending by a farmers' cooperative to exploit arbitrage opportunities has been accepted for publication in the *POM Journal*.

**The future roadmap:** Ashish aspires to produce quality research in the field of Operations Management. “My focus areas are energy storage, energy markets and sustainability. I wish to continue my research in the areas of supply chain management, inventory management and optimization.

**Family background:** Ashish comes from a family of farmers from Uttarakhand. His father had served the Indian Army and his mother is a homemaker. His younger brother trades agricultural commodities and oversees the family’s farming activities.