

TFK programme, funded projects 2025

Project title: Advancing Sustainable Digital Manufacturing Technologies Towards a Greener Society: A Joint Indo-Finnish Higher Education Initiative between UTU and IIT Delhi	
Coordinator Turun yliopisto ASHISH GANVIR, ashish.ganvir@utu.fi	AIM: This project aims to disseminate knowledge and strengthen strategic collaboration between the University of Turku (UTU), Finland, and the Indian Institute of Technology Delhi (IIT Delhi) in the domain of Sustainable Advanced Digital Manufacturing (SADM). Leveraging UTU's state-of-the-art facilities in digital manufacturing and IIT Delhi's globally recognized engineering strengths, the partnership forms a highly complementary and synergistic collaboration. The project has three main pillars: 1. Collaborative Research in SADM and Surface Coatings, aligned with Finland's Digital and Green transition goals. 2. Reciprocal Student and Staff Mobility, including internships, research stays, and virtual components for Bachelor's, Master's, and Doctoral students. 3. Doctoral Cotutelle Programme, leading to double degrees and long-term integration of joint supervision models. Notably, the collaboration builds on successful prior activities under the FICORE network, with student and faculty exchange, four co-authored publications and the joint organization of the "Indo-Finnish Winter School on Additive Manufacturing (IFAM) in India which attracted significant participation from both industry and academia. (https://ifamschool.fi/index.html).” The project also envisions creating a permanent Indo-Finnish Additive Manufacturing (IFAM) Network, fostering recurring events such as summer/winter schools and joint workshops. Activities: Key planned activities include: - Co-development of teaching modules, short-term training programs, and joint research projects. - Multi-directional mobility: faculty exchanges, student internships (3 months+), and hybrid course delivery.
Partners Indian Institute of Technology (IIT) Delhi, India	

	- Industrial collaboration with Finnish (e.g., Wärtsilä, Dimecc, Finish Additive Manufacturing Ecosystem (FAME), and VTT) and Indian (e.g., Meltio India, EOS India, Materialize India) partners to align academic work with real-world needs. Results: Expected results include: - A vibrant, sustainable Indo-Finnish academic-industry network on “Green and Digital” manufacturing: Indo-Finnish Additive Manufacturing (IFAM) network. - Two-fold increase in bilateral student and faculty mobility than previous cooperation. - A memorandum of understanding for an established joint doctoral supervision with first joint PhD thesis defense planned in 2027. - Research publications and joint grant proposals. - Broader institutional internationalization at both UTU and IIT Delhi. This project directly contributes to Finland’s internationalization goals and India’s aspirations in sustainable industry and digital education, ensuring long-term impact beyond the funding period.
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