

# Fostering India as a talent and innovation hub

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## #IamIBMExpert

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According to Nasscom's recently published [Global R&D Report, 2021](#) - the Indian Engineering R&D sourcing market is expected to grow at a 12-13 percent CAGR to reach USD 63 billion in 2025 from USD 31 billion in 2019. Among the key pillars that fuel India's attractiveness is - a strong focus on innovation, a large and diverse talent pool. Today, India is amongst the top 50 most innovative countries in the world and for the last ten years, it has continued to retain its position as the most innovative country in Central and South Asia. India also holds 22nd position in the quality of its universities globally that is not just creating industry-ready talent but also playing a significant role in driving innovation. Increased partnership and collaboration between industry and academia is augmenting both innovation and building an industry-ready talent pipeline.

At IBM, we are very proud of our academic collaborations and partnerships in India and globally that have given us access to scientific and engineering minds across multiple domains and helped us make fundamental and applied contributions to science and technology. Today, our academic collaboration with [IIT Delhi](#) and [IIT Bombay](#) has enabled us to advance the areas of Neurosymbolic AI and Multimodal AI. As part of this collaboration, we have created new scientific datasets and published research papers in machine-based question answering, machine reasoning to enable AI systems to explain their answers and language models for Indian languages. While this collaboration is enabling us to make scientific advances in AI, it provides students with the opportunity to work in an industry setting on real use-cases with actual datasets. We also organize joint workshops where the faculty and IBM researchers present their work to the broader scientific community in India, thus enabling knowledge sharing and encouraging leading-edge research.

Early this year, IBM announced our collaboration with the Indian Institute of Science - the world's top research university to launch the [IBM IISc Hybrid Cloud Research Lab](#). We aim to get scientists and students to solve problems such as distributed information management, verification, and optimization of cloud-native applications, and establish self-healing IT systems - to further advance the emerging hybrid cloud leveraging AI research applied to IT systems and machine language (or "Code"). This will help pave the way for accelerated value from the adoption of hybrid cloud across industries, and also catalyze a community of researchers, innovators, educators, and students at the growing intersection of Hybrid Cloud and AI.

And as we mature AI and Hybrid Cloud technologies, quantum computers are getting ready to augment their classical cousins and can significantly impact many industries and societies. Today, quantum computing is at a nascent stage and it is an opportune moment for India to take the lead and develop a strong workforce that is

ready for the quantum era. Here again, we have already partnered with the [leading institutions in India](#) to provide access to quantum computers over the cloud for teaching and research. We have also worked closely with institutions like IISER Pune, IISER Thiruvananthapuram, IIT Madras, and ISI Kolkata to offer Qiskit lab sessions where we enable students to develop quantum algorithms and code them to run on actual quantum computers.

At IBM, we see the future of computing in three technologies – conventional processors (“bits”), neural networks for AI (“neurons”), and quantum processors (“qubits”). These technologies will pave the way for more innovation and real benefits for organizations and industry-academic collaborations must be encouraged and nurtured for societal advantage.

We look forward to building these partnerships along with our academic partners to reach more students and solve challenging problems in science and technology.

To know more about our partnership with Indian academia on Quantum Computing - [Click here](#)

To know more about our collaboration with IISc, Bengaluru on Hybrid Cloud - [Click here](#)

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