

Reimagining Tourism Education in the AI age

As the tourism industry shifts toward automation, predictive intelligence, and hyper-personalised experiences, education has to adapt to technology-integrated and data-driven learning frameworks

Published – August 10, 2026 08:00 am IST

SHEFALI JOSHI



The future graduate is expected not only to manage operations but to interpret real-time data, optimise systems, and design seamless, tech-enabled travel experiences. | Photo Credit: Getty Images/iStockPhoto

The travel and hospitality sector is undergoing a structural transformation driven by AI, data analytics, and smart tourism ecosystems. As the industry shifts toward automation, predictive intelligence, and hyper-personalised experiences, travel education must evolve from traditional service models to technology-integrated and data-driven learning frameworks.

AI is already deeply embedded in global tourism operations. A significant proportion of travel companies now deploy generative AI for customer-facing services such as booking assistance, internal analytics and decision-making. Thus, education must move beyond operational training to include AI literacy, automation systems, and advanced data analytics as core competencies.

Curriculum reboot

Therefore, hospitality and travel programmes can no longer remain confined to domains such as front-office management or food-and-beverage operations. Instead, they must be interdisciplinary, integrating digital strategy, predictive modelling, and platform-based service design. The future graduate is expected not only to manage operations but to interpret real-time data, optimise systems, and design seamless, tech-enabled travel experiences.

A critical shift is curricula driven by real-time industry data and predictive insights. Static textbooks are increasingly insufficient in a sector where consumer behaviour, pricing models, and demand patterns change dynamically. Institutions must embed live dashboards, industry datasets, and AI-powered analytics tools into the learning process to enable students make decisions based on current market signals rather than retrospective case studies.

Equally important is the adoption of immersive learning environments using technologies such as Augmented Reality (AR) and Virtual Reality (VR). The latter can help students manage virtual hotels, respond to real-time guest situations, or navigate crises in a controlled environment. Virtual replicas of real-world destinations allow learners to analyse tourist flows, sustainability challenges, and infrastructure planning without physical constraints. This helps bridge the gap between theoretical knowledge and experiential learning at scale.

Smart destinations rely on interconnected systems powered by AI, the Internet of Things, and big data to deliver seamless and efficient experiences such as AI-driven chatbots and dynamic pricing, to biometric-enabled travel and real-time itinerary optimisation. Travel education must prepare students to work within and design for, these ecosystems.

At the heart of this transformation is the growing importance of hyper-personalisation, which requires professionals who can design journeys powered by recommendation engines, behavioural data, and predictive algorithms. Consequently, curricula must include modules on customer data platforms, experience design, and AI-driven personalisation strategies.

Human element

However, the integration of technology does not diminish the human element. It amplifies it. Institutions must adopt a human-centric approach in which empathy, cultural intelligence, and ethical judgement remain foundational. Faculty play a critical role in this transition, as facilitators who bridge advanced technological tools with real-world application and human insight. The classroom of the future should be hybrid, combining AI-enabled learning tools with mentorship-driven engagement.

Another essential dimension is the integration of ethics, data privacy, and responsible AI use into the curriculum. As technology adoption accelerates, concerns around algorithmic bias, data security, and digital inequity are increasing. Travel education must proactively address these challenges by embedding governance frameworks and ethical decision-making into programme structures, ensuring that graduates are not only skilled but also responsible practitioners.

As routine functions become automated, the demand for skills such as critical thinking, adaptability, digital fluency, and cross-disciplinary collaboration is rising. This necessitates a shift from static degree programmes to continuous, lifelong learning ecosystems, supported by strong industry-academia partnerships and modular curricula that are constantly being updated.

With the future of travel education at the intersection of AI, immersive technologies, data intelligence, and human experience, preparing graduates for this new reality is not just about keeping pace with the industry, but also about shaping its future.

The writer is Dean, School of Hospitality Management, NMIMS.

Published – August 10, 2026 08:00 am IST