

TECNIA INSTITUTE OF ADVANCED STUDIES

3 PSP, Institutional Area, Madhuban Chowk, Rohini, New Delhi-110085

6.2.1 Institutional Strategic/ Perspective Plan is Effectively Deployed

Additional Information

G1: To establish Centres of Excellences in various fields like Universal Human Values Development Centre, Professional Training & Development Centre, Centre of Excellence in Communications, Centre of Excellence Artificial Intelligence & Robotics & Centre of Excellence in Media Practices

Institute had established **CENTRES OF EXCELLENCE** in the following fields:-

- 1) Universal Human Values Development Centre - CoE
- 2) Professional Training & Development Centre - CoE
- 3) Centre of Excellence in Communications
- 4) Centre of Excellence in Artificial Intelligence & Robotics
- 5) Centre of Excellence in Media Practices

1) **UNIVERSAL HUMAN VALUES DEVELOPMENT CENTRE- CoE**

Universal Human Values Development Centre – Centre-Of-Excellence (previously UHV Cell) established in Tecnia Institute of Advanced Studies (TIAS), Delhi Universal Human Values & Student Induction Programme Cell is set up in accordance with the National Education Policy, AICTE guidelines. UHVDC-CoE in the Introductory year i.e. 2020-2021, 20 Nos. of faculty members be able to complete their FDP and are trained Mentor for UHV; and have completed Stage 1 and are committed to provide a safe, fair, holistic, harmonious learning with human values. Further, 02 faculty members have completed Stage 2 of the FDP in the session 2021-22 and are trained on UHV aspects and are inculcating and propagating the ethical principles. UHVDC describes the process where the incumbents adjust to or acclimatize to their new roles in well-planned manner and educate the new entrants in a particular institution, and connect them with the people in it.

2) **PROFESSIONAL TRAINING & DEVELOPMENT CENTRE - CoE**

“Centre of Excellence (CoE) is a body that provides leadership, best practices, research, support, training of trainers, and skill training for a specific sector/s. The literal meaning of Centre of Excellence is – ‘A place where the highest standards are maintained.’” -Skill India Professional Training and Development-Tecnia Centre of Excellence is a group with a shared area of focus and subject matter expertise that they use to support others, usually by providing tips, insights, training, and research for professionals. We standardize best practices for company-wide adoption and offer advice on strategic planning, decision-making, and execution. Thus, Professional Training and Development- Tecnia Centre of Excellence is resource centre, established/working in partnership with industry to raise training managers, address emerging skill gaps and align training & research with industry needs. Centers of excellence help optimize how work gets done. That’s why with the intent to overcome skill demand-supply mismatch, to have continuous supply of skilled workforce and disseminate

best practices, our Centre of Excellence is proposed to provide professional training and development in various managerial sector/s.

3) CENTRE OF EXCELLENCE FOR COMMUNICATION

Induction generally describes the process whereby the incumbents adjust to or acclimatize to their new roles and environment. In other words, it is a well-planned event to educate the new entrants about the environment in a particular institution, and connect them with the people in it. Tecnia Institute of Advanced Studies (TIAS), Delhi is committed to provide a safe, fair, holistic, harmonious learning with human values. Universal Human Values & Student Induction Programme Cell is set up in accordance with the AICTE guidelines.

4) CENTRE OF EXCELLENCE FOR ARTIFICIAL INTELLIGENCE & ROBOTICS

The Artificial Intelligence and robotics are the emerging fields of technology and the blend of these two technologies is the future of the current generation. It seems to be the most dominant blend in the history of industrial innovations. The AI and Robotics Development Centre (Centre of Excellence) at Tecnia Institute of Advanced Studies is an initiative taken with the intent of learning about the latest technologies of the field like Deep Learning, Machine Learning, and Robotics. The Centre of Excellence has given students ample opportunities to not only learn about them but also work with them to develop innovative things. An absolute new age of robotization is ready to transform every industrial process of Industry 4.0. AI-driven robots like Drones and AI driven medical instruments are considered more efficient than the old robots that used to work without AI technology. The AI and Robotic development Centre will have:- Establishment, Process set up, Training, Practical knowledge, Practical demonstration, Module development, Creation of Prototype, Executable Model, Patent, Commercial Diffusion.

Machine learning conditions the robots in such a way that with timely evolution, they learn from their own mistakes, thus preventing constant human intervention and parallel effort. This ensures adaptability in robotics. Along with these implications, AI and ML powered software products can analyse data from hundreds of sources and can give future predictions about the growth of Industry. AI can analyse consumer data and predict about consumer preferences, product development, and marketing channels. The students from different departments of Tecnia Institute of Advanced Studies are trained on technologies like machine learning, deep learning (a subset of machine learning) and robotics. Scikit-learn provides dozens of built-in machine learning algorithms and models, called estimators. Each estimator can be fitted to some data using its fit method. Scikit-learn is used by the students to create and evaluate the new model. TensorFlow is a low-level library that is also used by the students to implement machine learning techniques and algorithms.

5) CENTRE OF EXCELLENCE IN MEDIA PRACTICES

Centre of Excellence in Media Practices (CoE)