

Mapping of Data Science PILOs with Department Vision & Mission

PILO Category	Program Intended Learning Outcome (PILO)	Alignment with Department Vision	Alignment with Department Mission
A. Knowledge	PILO-1: Analyze complex computing problems using principles of computing and relevant disciplines.	Supports becoming a pioneering research department in data science solutions.	Enables students to identify and address data science challenges through modern academic programs.
	PILO-2: Design, implement, and evaluate computing-based solutions to meet requirements.	Drives development and dissemination of data science solutions (local/regional impact).	Provides standardized teaching/training to develop practical, scalable data solutions.
B. Skills	PILO-3: Communicate effectively in professional contexts.	Establishes the department as a hub for articulate data science professionals .	Ensures students can present data insights clearly in a pioneering academic environment.
	PILO-4: Recognize professional responsibilities and make ethical judgments in computing.	Reinforces ethical data practices (e.g., privacy, bias mitigation) in research.	Trains students to handle data-related challenges with legal/ethical awareness (e.g., GDPR, AI ethics).
C. Competences	PILO-5: Function effectively as a team member/leader in data science activities.	Promotes collaborative R&D (e.g., interdisciplinary data projects).	Prepares students for real-world teamwork (e.g., data engineering, analytics roles).
	PILO-6: Apply theory, techniques, and tools across the data science lifecycle to meet stakeholder needs.	Directly aligns with dissemination of data science solutions (applied research).	Equips graduates to solve stakeholder problems (e.g., business, healthcare) via end-to-end data pipelines.