POST GRADUATE DEPARTMENT OF COMPUTER SCIENCES

University of Kashmir, Srinagar-190006

NAAC Accredited Grade "A+"

NOTES

Minutes of the Departmental Committee Meeting held on 28th October, 2025

A Departmental Committee Meeting was held on 28th October, 2025 at 10:30 am under the Chairmanship of the Head of the Department in his office chamber and following were present.

1. Prof. Javaid Iqbal	Professor & Head	....in the Chair
2. Prof.M. Arif Wani	Professor	
3. Prof. Majid Zaman	Professor	
4. Dr. Manzoor Ahmad Chachoo	Scientist-D	
5. Dr. Sajad Mohd Khan	Scientist-B	
6. Dr. Sajid Yousuf Bhat	Sr. Assistant Professor	
7. Dr. Abid Sarwar	Sr. Assistant Professor	

The following issues were discussed:

Item-I:

In light of the instructions passed at the meeting regarding basket enhancement of accessory courses for the Five-Year Integrated Masters Programme, chaired by Dean Academic Affairs, on 27-10-2025 at 11:00 a.m. following VAC under the theme of Digital & Technological Solutions are the courses along with the syllabi that shall be offered by the Department of Computer Science for the purpose.

S.No.	Name of Course	Credits	Course Code
01	Introduction to A.I	2 credits	IXXXVAAI0025
02	AI & Data-driven Technologies	2 credits	IXXXVAAD0025

IXXXVAAI0025

IXXXVAA-D0025

The meeting ended with a vote of thanks to the chair

Prof. Javaid Iqbal
HOD

Prof.M.Arif Wani
Professor

Prof. Majid Zaman
Professor

Dr. Manzoor Ah. Chachoo
Scientist-D

Dr. Sajad M. Khan
Scientist-B

Dr. Sajid Y. Bhat
Sr. Assistant Professor

Dr. Abid Sarwar
Sr. Assistant Professor

Course: Introduction to Artificial Intelligence (AI)

Course Code: IXXXVAIID025

Credits: 2 (30 Hours)

Course Learning Outcomes: After successful completion of this course, students will be able to:

1. Understand the fundamental concepts, scope, and objectives of Artificial Intelligence as a discipline.
2. Explain the evolution and historical milestones that shaped the development of AI technologies.
3. Identify and describe major real-world applications of AI in everyday life and various industries.
4. Analyze the impact of AI-driven technologies on different sectors such as healthcare, finance, education, agriculture, and manufacturing.

Unit–I:

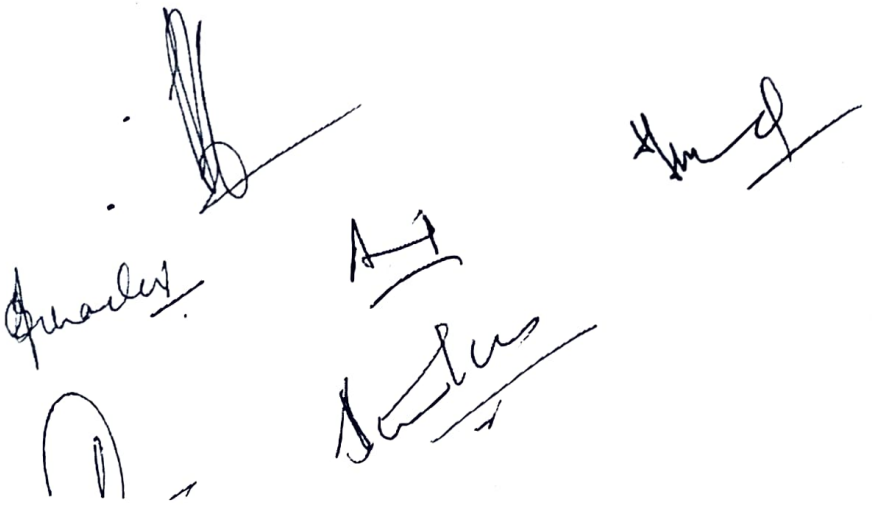
Definition, Scope, and History of Artificial Intelligence: Definition and objectives of Artificial Intelligence, Core concepts of human-like intelligence in machines, Scope and interdisciplinary nature of AI (Machine Learning, Natural Language Processing, Robotics), Evolution of AI: Early developments and Turing Test.

Unit–II:

Applications of AI in Daily Life and Industry: AI in everyday applications: Voice assistants (Siri, Alexa, Google Assistant), Recommendation systems (Netflix, Amazon, YouTube), Smart homes and wearable devices, Social media analytics and content moderation. Healthcare: medical diagnosis, drug discovery, robotic surgery, Finance: credit scoring, fraud detection, trading algorithms, Education: adaptive learning systems, AI tutors, assessment tools, Manufacturing and Industry 4.0: robotics, predictive maintenance, Agriculture: precision farming, drone-based crop monitoring, Transportation: self-driving cars, traffic control, logistics optimization, Customer support: chatbots and virtual service agents.

Suggested Readings / References:

1. Russell, S. & Norvig, P. — *Artificial Intelligence: A Modern Approach*, Pearson.
2. Negnevitsky, M. — *Artificial Intelligence: A Guide to Intelligent Systems*, Addison-Wesley.
3. Rich, E. & Knight, K. — *Artificial Intelligence*, Tata McGraw Hill



Course: AI and Data-Driven Technologies

Course Code: IXXXVADD025
Credits: 2 (30 Hours) IXXXVAAD0025

Course Learning Outcomes: After completing this course, students will be able to:

1. Understand the role and importance of data as the foundation of Artificial Intelligence and Machine Learning.
2. Explain how data quality, diversity, and volume influence the performance of AI and ML models.
3. Differentiate between various types of data — structured, unstructured, and semi-structured and their relevance in AI applications.
4. Explain the key features and benefits of cloud computing and its integration with Big Data solutions.

Unit–I:

Role of Data in Artificial Intelligence and Machine Learning: Importance of data as the foundation of AI and ML, How data drives model training, validation, and testing, Impact of data quality, diversity, and volume on AI performance, Examples: Image recognition, chatbots, recommendation systems.

Data Types and Data Sources:

Data Types: Structured, unstructured, and semi-structured data, Quantitative vs. qualitative data, Categorical, numerical, ordinal, and time-series data.

Data Sources: Primary sources: Surveys, experiments, sensors, and direct observations, Secondary sources: Databases, publications, open data portals, government and industry datasets, Internal sources: Organizational data (sales, finance, CRM), External sources: Social media, online platforms, APIs, and web data.

Unit–II:

Introduction to Big Data and Cloud Computing Concepts: Definition, characteristics, and significance of Big Data, The 5 V's of Big Data: Volume, Velocity, Variety, Veracity, and Value, Data sources and challenges in Big Data handling, Introduction to Big Data technologies: NoSQL databases, Data Lakes, Applications of Big Data in business, healthcare, and research. Definition and key features of cloud computing.

Suggested Readings / References:

1. Provost, F. & Fawcett, T. — *Data Science for Business*, O'Reilly.
2. Sharda, R., Delen, D. & Turban, E. — *Business Intelligence and Analytics*, Pearson.
3. Marr, B. — *Big Data in Practice*, Wiley.