


INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)
ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	Ms. J SIRISHA	Department:	Computer Science and Engineering (Data Science)
Regulation:	IARE - UG20	Batch:	2022-2026
Course Name:	Information Retrieval Systems	Course Code:	ACDC18
Semester:	VIII	Target Value:	60% (1.8)

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Identify ability to apply IR principles to locate relevant information large collections of data	0.90	2.20	1.2	Not Attained
CO2	Understand ability to design different document clustering algorithms	0.90	2.30	1.2	Not Attained
CO3	Implement Illustrate algorithms used for natural language processing	0.90	2.20	1.2	Not Attained
CO4	Apply implement retrieval systems for web search tasks	0.90	2.30	1.2	Not Attained
CO5	Understand design an information retrieval system for web search tasks	0.90	2.30	1.2	Not Attained
CO6	Develop understand query,document and phrase translation and design the method to build inverted index	0.90	2.20	1.2	Not Attained

Action Taken Report: (To be filled by the concerned faculty / course coordinator)

CO1: Since CO1 attainment was below the prescribed target, Intensive remedial instruction was undertaken on information retrieval principles and their application to large-scale information collections. Additional problem-solving sessions, real-world search examples, and application-oriented exercises were conducted. Students were provided with structured practice assignments and additional assessments to strengthen their ability to identify and retrieve relevant information effectively.

CO2: To improve the attainment of CO2, focused remedial and hands-on sessions on document clustering algorithms were conducted. Students were trained through step-by-step implementation exercises covering document representation, similarity computation, clustering techniques, and evaluation. Additional laboratory assignments and practice problems were given to ensure students could independently design and apply suitable document clustering algorithms.

CO3: As CO3 was not attained, intensive practical training on Natural Language Processing algorithms was provided. Additional sessions were conducted covering essential NLP operations used in Information Retrieval, followed by implementation-oriented exercises. Students were assigned additional programming tasks and case-based problems to strengthen their ability to implement and apply NLP algorithms effectively.

CO4: To address the attainment gap in CO4, additional laboratory and application-oriented sessions on web-based Information Retrieval systems were conducted. Students were given hands-on practice in query processing, indexing, retrieval, ranking, and search-result generation. Additional implementation assignments and practical evaluations were conducted to enhance students' ability to develop and implement retrieval systems for web search applications.

CO5: To improve CO5 attainment, intensive design-oriented remedial sessions were conducted on Information Retrieval system architecture for web search tasks. Students were guided through the complete design process, including document processing, indexing, query processing, retrieval, ranking, and result presentation. Additional system-design exercises, case studies, and mini-project-based activities were assigned to improve their ability to design an effective Information Retrieval system.

CO6: To overcome the attainment deficiency in CO6, additional hands-on sessions were conducted on query, document and phrase translation and inverted-index construction. Students performed implementation-based exercises on index generation, query processing, term mapping, and retrieval. Additional laboratory assignments and competency-based assessments were conducted to ensure students gained sufficient practical proficiency in designing and implementing inverted-index-based retrieval mechanisms.


Course Coordinator
Mentor
Head of the Department