Abstract

The main objective of this paper is to introduce a new fuzzy model called Combined Fuzzy Clustering Model (CFCLM). First time the working rule for this model is derived by creating an algorithm. The study of failure in Mathematics among engineering students is analyzed using Combined Fuzzy Clustering (CFCLM) model. It is important to note that the performance in mathematics in all the engineering colleges, including IITs by students undergoing B. E and B. Tech courses are considerably poor. This paper analyzes the problem by taking a pilot survey from 100 Engineering students, Engineering faculties and parents of engineering students. This paper consists of eight sections. Section one is introductory in nature that gives the background of the problem under study and gives the justification for having chosen to use the "Combined Fuzzy Clustering Model" approach to seek the dominant cause for the failure. Section two discuss about the causes for failure in mathematics by engineering students. Section three gives the preliminaries and the basics of Combined Fuzzy Clustering Model approach. Section four deals with the application of the said approach in determining the cluster of problems, that fall under the three categories viz, "low", "moderate" and "high". Section five consists of the algorithm used for
the study of the problem. Sixth and Seventh section give the main findings as conclusion and suggestions. And, the final eighth section gives the references used for the study.

References

- J. Klir George/Bo Yuan, "Fuzzy sets and Fuzzy Logic: Theory and Applications", Prentice Hall of India.

Index Terms

Computer Science  Fuzzy Systems

Keywords

Clustering  Fuzzy Clustering  Combined Fuzzy Clustering Model (CFCLM)  Degrees
of Membership

Failure in Maths.