



# SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A++ Grade

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## ARTIFICIAL INTELLIGENCE FOR ELECTRICAL ENGINEERING

UNIT III

TOPIC: **DEFUZZIFICATION METHODS**





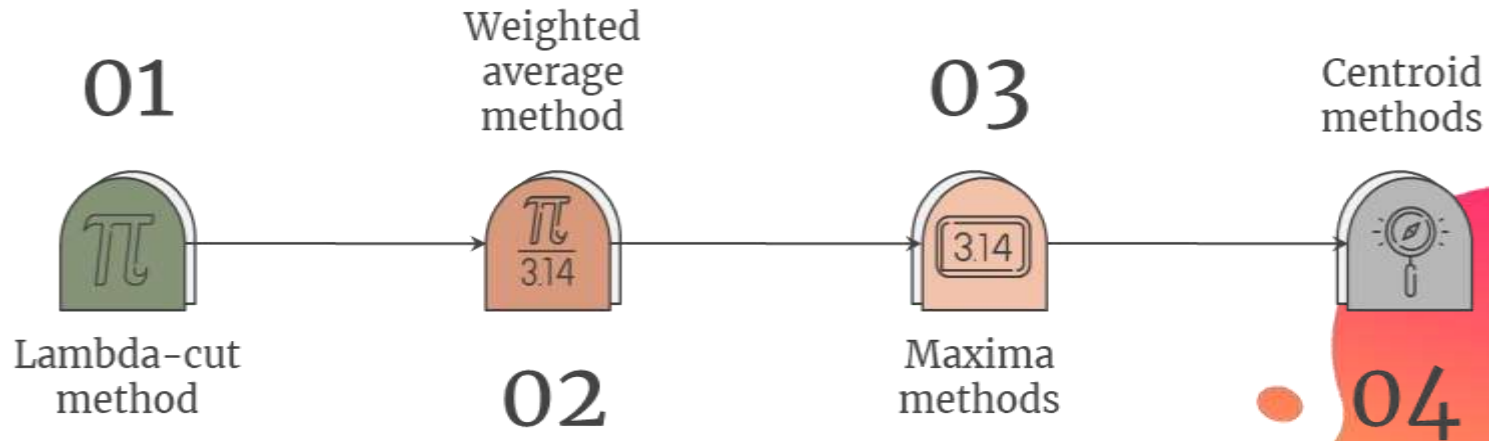
# Defuzzification

## Empathy part...

Defuzzification is the process of obtaining a single number from the output of the aggregated fuzzy set. It is used to transfer fuzzy inference results into a crisp output.



# Defuzzification Methods





# Lambda - cut Method

Lambda-cut method is applicable to derive crisp value of a fuzzy set or relation. In many literature, Lambda-cut method is also alternatively termed as Alpha-cut method.



# Weighted Average Method



This method is also alternatively called “Sugeno defuzzification” method. The method can be used only for symmetrical output membership functions.



# Maxima Methods



- Height method
- First of Maxima (FoM)
- Last of Maxima (LoM)
- Mean of Maxima(MoM)



# Centroid Methods

- Center of Gravity Method (CoG)
- Center of Sum method (CoS)
- Center of Area method (CoA)



THANK YOU