



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



19EEB302/ POWER SYSTEMS – II

III YEAR / VI SEMESTER

UNIT-II : STABILITY ANALYSIS

MODIFIED EULER'S METHOD



Modified Euler Method

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- The modified Euler method tries to overcome this issue by using the average of the derivatives at the two ends.



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It consists of the following steps.

- 1 Predictor step

$$x_1^p = x_0 + \left. \frac{dx}{dt} \right|_{x=x_0} \Delta t$$

- 2 Corrector step

$$x_1^c = x_0 + \frac{1}{2} \left(\left. \frac{dx}{dt} \right|_{x=x_0} + \left. \frac{dx}{dt} \right|_{x=x_1^p} \right) \Delta t$$

This process has to be repeated until the desired accuracy or the final simulation time.



RECAP....



...THANK YOU