# TS EAMCET 2024 Syllabus for Mathematics

The mathematics section of the exam for the engineering stream will include questions based on subjects given below.

## Algebra Syllabus

This subject includes the following topics:
- Matrices and types of Matrices
- Equality of Matrices, transpose of a Matrix
- Symmetric and Skew Symmetric Matrix
- Algebra of Matrices
- Determinants
- Inverse of a Matrix
- Solving simultaneous equations using the Matrix Method

## Topics in Trigonometry

The questions based on the trigonometry under the mathematics section will be derived from the topics given below:
- Trigonometric identities and equations
- Trigonometric functions
- Inverse trigonometric functions and their properties
- Heights and distance

## Topics in Probability

The probability-based questions will be based on the following:
- Random variables and their probability distribution
- Expected value of a random variable
- Variance and Standard Deviation of a random variable

## Calculus Topics

The question based on the subject can include the following topics:
- Higher order derivatives
- Tangents and Normals
- Increasing and Decreasing Functions
- Maxima and Minima

## Detailed Coordinate Geometry

Candidates can check the following topics to understand the questions that will be included in the exam based on coordinate geometry:
- Cartesian system of rectangular coordinates in a plane,
- Distance formula,
- Sections formula,
- Locus and its equation,
- Translation of axes,
- The slope of a line,
- Parallel and perpendicular lines,
- Intercepts of a line on the coordinate axis