

# ■ Calculus Syllabus Comparison: JEE vs TS EAPCET vs UGEE (SUPR)

This comparison highlights topic coverage and conceptual depth across three major exams.

Topic	JEE	TS EAPCET	UGEE (SUPR)	Remarks / Depth
Limits & Continuity	■ Full	■ Full	■ Conceptual	Common to all exams; fundamental concept.
Differentiability & Derivatives	■ Full	■ Full	■ Conceptual	Core derivative concepts and applications.
Applications of Derivatives	■ Full	■ Partial	■ Conceptual	Curve behavior, maxima/minima, optimization.
Mean Value Theorems	■	■■ Basic	■	Conceptual in UGEE; minimal formula use.
Integration (Indefinite & Definite)	■ Full	■ Full	■ Conceptual	Standard integral techniques and applications.
Area under Curves	■ Full	■ Full	■ Conceptual	Common topic; UGEE tests logical understanding.
Differential Equations	■ Full	■■ Basic	■■ Conceptual	UGEE focuses on interpretation, not solving.
Convergence/Divergence of Series	■■ Optional	■	■	Advanced concept; relevant for engineering.
Partial Derivatives / Multivariable	■	■	■■ Intro	Introduced in engineering calculus.
Multiple Integrals	■	■	■■ Intro	Engineering-level, not entrance-focused.

**Summary:**

If you master JEE Calculus, you automatically cover 100% of TS EAPCET and about 80% of UGEE SUPR syllabus. UGEE emphasizes conceptual reasoning, pattern recognition, and the 'why' behind formulas, while JEE emphasizes speed and accuracy. Use this as a unified reference to plan your preparation efficiently across all exams.