

■ 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 concepts
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 usage
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.