CALCULUS, CERTIFICATE OF ACHIEVEMENT

Banner Code: 3_CN_MATHC
Control Number: 46538
Not Financial Aid Eligible

The Certificate of Achievement in Calculus provides a comprehensive foundation in differential and integral calculus for students pursuing studies in mathematics, engineering, physics, computer science, and related STEM fields. The sequence develops conceptual understanding, procedural fluency, and problem-solving skills in single- and multivariable calculus. Students learn to model change, analyze motion, and apply calculus techniques to real-world and scientific problems.

Completion of this certificate enhances a student's professional portfolio, even before they complete their associate's degree. Completing this certificate demonstrates, to potential employers, mathematical readiness for work that requires mathematical, analytical, modeling, and problem-solving skills, including such Math jobs as tutoring, technician, or intern.

Program Learning Outcomes

1. Differentiate and integrate functions of one and several variables using appropriate theorems and techniques.
2. Apply calculus concepts to model and solve physical, biological, and economic problems.
3. Communicate mathematical reasoning clearly using correct notation and logical structure.

Course	Title	Units
Required Core		
MATH C180	Calculus 1	5
MATH C185	Calculus 2	5
At least 2 of:		9-10
MATH C280	Calculus 3	
or MATH C285	Introduction to Linear Algebra and Differential Equations	
or MATH C170	Precalculus	
or STAT C1000	Introduction to Statistics	
Total Units		**19-20**