

### Course Outline

- Pre-calculus topics (set theory, combinations and permutations, mathematical induction, binomial theorem, exponential, logarithmic and trigonometric functions)
- Limits and Differentiation with Applications
- Indefinite and Definite Integrals with Applications

### Learning Outcomes

On successful completion of this course, students should be able to:

Course Learning Outcomes (CLO)	
CLO 1	use the set notations; calculate probabilities; and prove by induction
CLO 2	solve problems involving exponential, logarithmic and trigonometric functions
CLO 3	evaluate limits and derivatives
CLO 4	compute simple definite and indefinite integrals
CLO 5	solve practical problems such as determining maxima and minima; finding area

### Study Load

36 contact hours + 40 learning hours

### Assessments

- Assignments (5%)
- Three online tests (45%)
- Final examination (50%)

No supplementary tests and examination will be offered.