- SLO 1: Categorize and analyze mathematical objects and apply them to real life problems
- Define and setup tables, diagrams, graphs, and matrices
- SLO 2: Solve mathematical problems from different branches of mathematics
- Manipulate and solve problems relating to algebra
- Apply basic geometric axioms, definitions, and theorems to solve geometric problems
- Recognize principles of counting techniques to determine number of ways to select members from a group for a specific task
- Compute mean, median, mode, range, standard deviation, and variance of a set of data
- SLO 3: Interpretations of mathematical objects in a variety of analytical settings and performing different operations to combine these objects
- Recognize different representations of sets and performing different set operations to combine sets
- Apply the logic properties to assess the validity of an argument
- SLO 4: Apply the mathematical concepts or objects to assess a situation , make decisions, and solve the real life problems
- Assess the risks and rewards of credit cards and investments, and select the optimal path for a delivery route
- Create an efficient schedule, select a fair method for dividing valuable assets, and evaluate the efficiency of an algorithm
- SLO 5: Defend some aspects of the mathematics used in real life applications
- Investigate and solve real life problems such as home mortgage loans and student loans

Pursue the meaning of mathematics through the history of different numeration system and the progression of mathematics