## Program: BA Joint Major in Mathematics and Computer Science

## 1. Learning Objectives and Evaluation:

Students graduating with a major in Mathematics, Pure and Applied Track are expected to:

- 1. Demonstrate a mature understanding of single and multivariable Calculus up through differential equations and of linear algebra.
- 2. Demonstrate a clear understanding of the concept of mathematical proof and be able to present a rigorous proof of basic theorems.
- 3. Attain a level of mathematical ability allowing the student to formally abstract and analyze computational processes.
- 4. Understand and evaluate the organization, design, and construction of hardware and software systems for computing.
- 5. Analyze problems that require computation to answer, and design and implement appropriate problem solutions that are efficient and effective.
- 6. Demonstrate a facility to use the techniques of Mathematics and of Computer Science to address problems from both fields.