**Applied Emphasis Prerequisite Flow Chart**

- **MATH 323 (F/S/Sum)** Formal Math Reasoning/ Writing
- **MATH 223 (F/S/Sum)** Vector Calculus
- **MATH 355 (F/S)** Anls Ord Diff Eqns
- **MATH 313 (F/S/Sum)** Intro to Linear Alg
- **CSC 110/ISTA 130** Programming (offerings vary)

**Path 1:**
- MATH 323
- MATH 223
- MATH 355
- MATH 313
- CSC 110/ISTA 130

**Path 2:**
- MATH 464 Theory of Probability
- MATH 422 Adv Applied Anls

**Path 3:**
- MATH 454 Ordinary Diff Eqns
- MATH 475A Numerical Analysis

**Path 4:**
- MATH 443 or 445 or 447 or 454 or 456 or 464

**Required Courses:**
- MATH 466 Theory of Statistics
- MATH 485 Modeling

- **Recommended Courses:**
  - MATH 422
  - MATH 456 Partial Diff Eqns
  - MATH 475A Numerical Analysis

**Notes:**
- * = 475B is discontinued. Students in the Applied emphasis may choose one of these courses in addition to 475A for their "sequence".

**Prerequisites:**
- MATH 422 (F/S/Sum)
- MATH 454 (F/S)
- MATH 456 (S)
- MATH 485 (S)

**Other:**
- **MATH 422 (F/S/Sum)** Adv Applied Anls Required
- **MATH 475A (F)** Numerical Analysis Required
- **MATH 4XX (?)** 5th Advisor-approved (Prereqs vary)

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* = Required for Math major

= Required for this emphasis

= Several options are available to fulfill requirement