## BA in Mathematics (Emphasis Applied/Actuarial)

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| MATH 241 Calculus I FS <br> English 100 FW FG <br> HSL 101 <br> Elective | MATH 243 Calculus III MATH 321 Intro. to Advanced Math. W DB/ DY DS HSL 201 | MATH 412 Intro. to Abstract Algebra I W <br> Math 302 Intro Differential Equations I DS DA Elective | MATH 431 Principles of Analysis I W MATH 471 Probability Elective E <br> Elective <br> Elective |
| MATH 242 Calculus II <br> FG <br> DH <br> HSL 102 <br> Elective | MATH 244 Calculus IV MATH 311 Intro. to Linear Algebra MATH 331 Intro. to Real Analysis W HSL 202 Elective | MATH 442 Vector <br> Analysis <br> Math 372 Elementary <br> Probability and <br> Statistics** <br> Elective W <br> Elective <br> DP | MATH 407 Numerical <br> Analysis <br> MATH 472 Statistical <br> Inference <br> MATH 480 Senior <br> Seminar O <br> Elective <br> Elective |

## Foundations and

Diversification
These include the calculus I-
IV and UHM Gen. Ed. Core Requirements.

Hawaiian/Second Language and Focus
These graduation requirements include two years of language and an Ethics, Writing Intensive and Oral component.

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\begin{aligned}
& \text { Bridge } \\
& \text { These courses are your bridge to } \\
& \text { upper level mathematics. In } 307 \text { or } \\
& 311,321, \text { \& } 331 \text { you develop the tools } \\
& \text { to do advanced mathematics. The } \\
& 300 \text { level topisc courses are good to } \\
& \text { take in your } 2^{2 d} \& 3^{\text {r }} \text { year. } \\
& 311 \text { Intro. Linear } \\
& \text { Algebra } \\
& 307 \text { Linear Alg. \& Diff. } \\
& \text { Eqns. } \\
& 321 \text { Intro. Adv. Math } \\
& 331 \text { Intro. Real Analysis } \\
& 301 \text { Intro. Discrete } \\
& \text { Math } \\
& 302 \& 303 \text { Intro. Diff. } \\
& \text { Eqns* } \\
& 304 \& 305 \text { Math } \\
& \text { Modeling } \\
& 351 \& 352 \text { Foundation of } \\
& \text { Euclidean \& Non- } \\
& \text { Euclidean Geometry } \\
& 372 \text { Elementary } \\
& \text { Probability \& Statistics }
\end{aligned}
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## Core

These are the core courses of the major. Math 412 \& 413, and 431 are minimum requirements for most graduate math programs. Even if you are not continuing to grad school, math majors should take the bulk of their courses from this section.

## 412 \& 413 Intro. Abstract Algebra

431 \& 432 Principles of Analysis
402 Partial Diff. Eqns. 407 Numerical Analysis 411 Linear Algebra 420 Intro. to Theory of Numbers
421 Topology
442 Vector Analysis
443 Differential Geometry
444 Complex Analysis
454 Axiomatic Set Theory
455 Math Logic
471 Probability
472 Statistical Inference

