

# “OK, I’ve got some data. Now what?”

## MA422 Mathematical Modeling

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I often hear: “Prof. Vas, **what comes after calculus?**”. Taking Mathematical Modeling course is the perfect way for you to find that out. The course can be considered the **next step in building your problem solving skills.**

A **mathematical model** is a description of a physical (“real world”) phenomenon given by mathematical formulas. Mathematical models are widely used in natural, health and social sciences.

Topics include:

- Dynamical systems
- Dimensional analysis
- Empirical modeling
- Simulation modeling
- Optimization

### Prerequisite:

Calculus 2.

### Mathematics Minors:

MA422 can be used as an elective for the minor.

