# Mathematica @ Northland Comm. College



## What is *Mathematica*?

*Mathematica* is a software package for communicating scientific ideas, whether this is visualization of a concept in an intro-level course, or creating a simulation of a new idea related to research. *Mathematica* is used in virtually all of the world's top universities and colleges, and is commonly used in the following types of departments ---- <u>Mathematical Sciences</u>, <u>Physical Sciences</u>, <u>Business and Finance</u>, <u>Life Sciences</u>, <u>Engineering</u>, <u>Computer Science</u>

## How to Get Mathematica

- <u>Student personally owned machines</u>
  Follow the directions below to download from the Wolfram User Portal.
  - 1. Create an account:

(New users only)

- (a) Go to user.wolfram.com and click "Create Account"
- (b) Fill out form using a @student.northlandcollege.edu email, and click "Create Wolfram ID"
- (c) Check your email and click the link to validate your Wolfram ID
- 2. Request a key:
  - (a) Fill out this form to request an Activation Key
  - (b) Click the "Product Summary page" link to access your license
  - (c) Click "Get Downloads" and select "Download" next to your platform
  - (d) Run the installer on your machine, and enter Activation Key at prompt
- Faculty and staff campus machines

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Faculty and staff personally owned machines
 Fill out <u>this web form</u> to request a home-use license from Wolfram

Mathematica is currently installed in the following locations:

All public computer labs

#### Tutorials to Learn Mathematica

The first two tutorials are excellent for new users, and can be assigned to students as homework to learn *Mathematica* outside of class time.

- <u>Hands-On Start to Mathematica</u> Collection of tutorials to branch out and explore more specific applications and areas of Mathematica
- What's New in Mathematica 9 Provides examples to help you get started with new functionality in Mathematica 9, including the predictive interface
- Learning Center Search Wolfram's large collection of materials for example calculations or tutorials in your field of interest

#### Teaching with Mathematica

- How To Create a Lecture Slideshow Show a mixture of graphics, calculations, nicely formatted text, as slides with live calculations or animations in class
- Assigning Student Projects (Video Tutorial) Give students guided projects to explore concepts either through a Course Management System to supplement your text
- Full Collection of How To Tutorials Ranging from how to create animations to basic syntax information

### Research with Mathematica

- Programming and Parallel Computing Basics (Video Tutorial) Learn how to create programs and take advantage of multi-core machines or a dedicated cluster
- Scope of Field-Specific Applications Learn what areas of Mathematica are useful for specific fields