Wells College

Name:_____

Advisor:_____

Graduation Year:_____

Mathematics Major

The number of courses required for the major is 14 (43-46 semester hours). At least four of these courses (12 semester hours) must be at the 300-level or above. Internships may not be used to fulfill major requirements.

Requirements:

All of the following (25 sem. hrs.)

- ☐ CS 131 Programming I: Procedural Methods (3 sem. hrs.)
- ☐ MATH 111 Calculus I: Introduction to Calculus (4 sem. hrs.)
- ☐ MATH 112 Calculus II: Introduction to Calculus (4 sem. hrs.)
- ☐ MATH 212 Linear Algebra (3 sem. hrs.)
- ☐ MATH 267 Discrete Mathematics (3 sem. hrs.)
- ☐ MPS 402 Senior Seminar in Mathematical and Physical Sciences I (2 sem. hrs.)
- ☐ MPS 403 Senior Seminar in Mathematical and Physical Sciences II (2 sem. hrs.)
- ☐ PHYS 111L Fundamentals of Physics I (4 sem. hrs.)

One of the following (3 sem. hrs.)

- ☐ MATH 312 Real Analysis (3 sem. hrs.)
- ☐ MATH 313 Abstract Algebra (3 sem. hrs.)

Two of the following (6 sem. hrs.)

- ☐ MATH 211 Calculus III: Multivariable Calculus (3 sem. hrs.)
- ☐ MATH 213 Ordinary Differential Equations and Applications (3 sem. hrs.)
- ☐ MATH 251 Mathematical Statistics I (3 sem. hrs.)
- ☐ MATH 300 Probability Theory (3 sem. hrs.)
- ☐ MATH 301 Applied and Computational Mathematics (3 sem. hrs.)
- ☐ MATH 305 Operations Research (3 sem. hrs.)
- ☐ MATH 312 Real Analysis (if not taken above) (3 sem. hrs.)
- ☐ MATH 313 Abstract Algebra (if not taken above) (3 sem. hrs.)

Three of the following (9-12 sem. hrs.)

- ☐ Courses in mathematics, computer science, or physics above the 100-level (3-4 sem. hrs.)
- ☐ CHEM 301 Physical Chemistry (3 sem. hrs.)
- ☐ CS 132 Programming II: Object Orientation (3 sem. hrs.)
- ☐ ECON 314 Econometrics (4 sem. hrs.)

What can I do with this major?

See below for examples of what you can do with a Mathematics major after graduation!
For more information, see the full results at http://whatcanidowiththismajor.com/major/

Areas of employment

- Modeling and Simulation
- Numerical Methods and Analysis
- Statistics and Probability
- Engineering Analysis
- Differential Equations
- Operations Research
- Discrete Mathematics
- Insurance
- Banking and Finance
- Sales
- Actuarial Science
- Risk Management/Assessment
- Loss Management/Control
- Underwriting

Potential Employers

- State Agencies
- Federal Agencies
- Electronics manufacturers
- Engineering firms
- Insurance companies
- Financial services firms
- Chemical companies
- Aerospace equip. manufacturers
- Airlines and airports
- Insurance carriers
- Insurance agents and brokers
- Banks
- Brokerage firms
- Public and private K-12 schools
- Universities and colleges

- Math can be found in almost every sector of the world of work. Students majoring in math should consider if they want to use math skills directly or indirectly in the work place. This may determine the types of experiences and further education necessary to prepare for area of interest.
- People with math backgrounds may work in jobs with titles such as: analyst, research associate, technical consultant, computer scientist, or systems engineer to name a few.
- Math majors develop many transferable skills including critical thinking, problem diagnosis and solving, computer skills, and quantitative skills. Other important skills to develop include good reasoning, persistence, and communication, both verbal and written.
- Research the Professional Science Master's degree as an option to earn an interdisciplinary graduate degree and prepare for a job in industry.