t

G Μ (2009). Associate Professor of Mathematics and Department Chair. B.S., Auburn University; Ph.D., Virginia Polytechnic Institute and State University.

(1998). Professor of Mathematics. B.S. and B D M.S., Pittsburg State University; Ph.D., University of North Texas.

R (1969). Associate Professor of Mathematics. D B.S., University of Memphis; M.A.T., Purdue University; M.S., University of Arkansas, Additional study, University of Wisconsin, University of Arkansas, University of Missouri-Rolla.

C Η (1995). Professor of Mathematics. B.S., Campbellsville College; M.A., Morehead State University; Ed.D., University of Kentucky.

(1981). Associate Professor of Mathematics D and Computer Science. B.S., Union University; M.S. (Mathematics) and M.S. (Computer Science), University of Memphis.

Μ L (1993). Professor of Mathematics. B.G.S., Louisiana Tech University; M.S., University of Nebraska; Ph.D., Tulane University.

Τ R (1993, 2000). Professor of Mathematics. B.S., University of South Dakota; M.A., and Ph.D., University of Nebraska-Lincoln.

# t ff

C R (2006). Academic Secretary— Engineering, Physics, Math, and Computer Science.

# , nt <u>n t t</u>

Union's mathematics program seeks to further students in their quest for increased understanding of Creation and the created order and to equip students to serve God, church and society through excellence in thinking and the use of mathematics. We do this through a curriculum that develops the student's ability to think logically, analytically, and abstractly; to pursue a body of knowledge whose basis is independent of both empirical observation and culture; and to learn humility and a sense of wonder at the complexity, beauty, and applicability of mathematics.

# t .**n**t

AD , . is given to the senior who places Α first in the Major Field Test for Mathematics as partial fulfillment of MAT 498.

is awarded to a freshman I.A Т R calculus student chosen by the Department of Mathematics based upon demonstrated outstanding achievement, enthusiasm, ingenuity, and creativity in mathematics.

The department offers a major in mathematics and minors in mathematics, mathematics with emphasis in statistics, and actuarial science, and an interdisciplinary minor in Computational Engineering Science. Students majoring in mathematics may select from the following tracks: mathematics, teacher licensure in mathematics for secondary education (grades 7-12), or actuarial science. The offerings of mathematics, for entry into mathematics-related work fields,

and for teaching mathematics at the secondary level. Students majoring or minoring in mathematics begin their academic credit towards the major or minor with courses numbered MAT 205 or above. Students having a four-year high school mathematics program that included trigonometry should be able to begin the calculus sequence in their first semester. I. M Μ 35

- A.MAT 207, 208, 211, 212, 213, 315 and 498 are required. B. Select one: MAT 411, MAT 415.
- C. Select 9 hours from junior or senior MAT courses.
- D. Independent Study (MAT 495) or Departmental Special Study (MAT 395) may be used for 3 of the 9 hours required in C.
- E. Prerequisites: PHY 231, and CSC 115 or 255.
- II.M Μ D . -S. Η 36
  - A. MAT 207, 208, 211, 212, 213, 315\*-21 hours
  - B. MAT 411\* and MAT 415\*-6 hours
  - C. Upper Level MAT \*Elective hours—6 hours
  - D. Three 300 or 400 level MAT courses from \* above taken under honors-contract, as approved by the department, to include 411 or 415 with at least two completed prior to the semester in which the honors project is completed—9 hours
  - E. Independent Study (MAT 495) or Departmental Special Study (MAT 395) may be used for 3 of the 6 hours required in C.
  - F. Attend at least 4 honors colloquia during each of the junior and senior years, as approved by the Director of the Honors Community.
  - G.MAT 498—3 hours to include the honors project.
  - H. Admissions Standards met and Progression Standards continue to be met throughout the program.
  - I. Prerequisites: PHY 231, and CSC 115 or 255.

MATHEMATICS

 $\mathbf{III}.\mathbf{T} \quad \mathbf{L} \quad \mathbf{L} \quad \mathbf{M} \quad \mathbf{M} \quad \mathbf{G} \quad \mathbf{G} \quad \mathbf{G} \quad \mathbf{12}$ 

- B. Professional Education:
  - 1. Prior to Internship EDU 150, EDU 305, EDU 358, PSY 213, PSY/SE 230.
  - 2. Fall of Internship Year EDU 306, 340, 422, 440
  - 3. Spring of Internship Year EDU 441 and 451
- C. Completion of applicable portions of the Praxis II.
- D. For additional information, see the Assistant Dean for Teacher Education and Accreditation.
- I.M. M. M. M. 21.
  - A.MAT 211 and 212
  - B. Select one: MAT 205, 207, 208, 213; CSC 115, 255
  - C.6 hours of upper-level MAT courses.
  - D. The remaining must be 205 or higher.
- M M • • • • • • • 20
- 21. . . .
- A.MAT 211 and 212, 208, 305, and 405
- B. One of: MAT 213, 314, 315; CSC 115 or 255.

97

Graduation with Discipline-Specific Honors in Mathematics requires the student must:

- Complete degree requirements with a minimum 3.50 mathematics GPA ,
- Complete each honors contract course with a grade of B or better,
- Present the project at the Union University Scholarship Symposium,
- Apply to present the project at an off-campus meeting, and
- •

# 412. A II (3) A N

Prerequisite: MAT 411

A continuation of MAT 411. Topics include sequences of functions, infinite series, and further development of the theory of integration and other topics from MAT 411. Additional topics at the discretion of the instructor.

#### 413. C G (3) T

Prerequisite: MAT 207 and 212. Topics include axiomatic foundations of Euclidean and non-Euclidean geometry, models for incidence geometries, and development of theorems in the geometries of the Euclidean

-

100