School of Natural Sciences and Mathematics

The School of Natural Sciences and Mathematics (NS&M) houses six departments, each with graduate programs: Biological Sciences (MS, PhD); Chemistry and Biochemistry (MS, PhD); Geosciences (MS, PhD); Mathematical Sciences, emphasizing Applied Mathematics and Statistics and Actuarial Science (MS, PhD); Physics (MS, PhD); and Science and Mathematics Education (Master of Arts in Teaching). In addition, there are three interdisciplinary degrees offered: Bioinformatics and Computational Biology (MS) and Geospatial Information Sciences (MS, PhD). Each program is relatively small and thus able to provide excellent graduate student - faculty contact, while maintaining a strong research program. Increasingly, departments interact with each other in research, allowing interdisciplinary efforts to flourish. A number of well-funded Research Centers and Institutes are also housed in NS&M; these allow graduate students to approach real world, cutting edge research problems while working side by side with professional research staff and internationally recognized faculty. They are: the Center for Applied Biology; the Center for Lithospheric Studies; the UT Dallas NanoTech Institute; the Center for Quantum Electronics; and the Center for Space Sciences.

Degrees Offered

Biological Sciences

- **Master of Science in Biotechnology** (36 semester credit hours minimum)
- **Master of Science in Molecular and Cell Biology** (36 semester credit hours minimum)
- **Doctor of Philosophy in Molecular and Cell Biology** (75 semester credit hours minimum beyond the baccalaureate degree)

Chemistry and Biochemistry

- **Master of Science in Chemistry** (30 semester credit hours minimum)
- **Doctor of Philosophy in Chemistry** (75 semester credit hours minimum beyond the baccalaureate degree)

Geosciences

- **Master of Science in Geosciences** (36 semester credit hours minimum)
- **Doctor of Philosophy in Geosciences** (75 semester credit hours minimum beyond the baccalaureate degree)

Mathematical Sciences

- **Master of Science in Actuarial Science** (36 semester credit hours minimum)
- **Master of Science in Mathematics - Specialization in Applied Mathematics** (36 semester credit hours minimum)
• **Master of Science in Mathematics - Specialization in Engineering Mathematics** (36 semester credit hours minimum)

• **Master of Science in Mathematics - Specialization in Mathematics** (36 hours minimum)

• **Master of Science in Mathematics - Specialization in Statistics** (36 semester credit hours minimum)

• **Doctor of Philosophy in Mathematics - Specialization in Applied Mathematics** (75 semester credit hours minimum beyond the baccalaureate degree)

• **Doctor of Philosophy in Mathematics - Specialization in Statistics** (75 semester credit hours beyond the baccalaureate degree)

### Physics

• **Master of Science in Physics** (30 semester credit hours minimum)

• **Doctor of Philosophy in Physics** (75 semester credit hours minimum beyond the baccalaureate degree)

### Science and Mathematics Education

• **Master of Arts in Teaching in Science Education** (36 semester credit hours minimum)

• **Master of Arts in Teaching in Mathematics Education** (36 semester credit hours minimum)

### Interdisciplinary Studies

• **Master of Science in Bioinformatics and Computational Biology** (36 semester credit hours minimum)

• **Master of Science in Geospatial Information Sciences** (30 semester credit hours minimum)

• **Doctor of Philosophy in Geospatial Information Sciences** (75 semester credit hours minimum beyond the baccalaureate degree)

### Faculty

**Distinguished Chair in Natural Sciences and Mathematics; Dean of the School of Natural Sciences and Mathematics:** Bruce M. Novak

**Cecil and Ida Green Distinguished Chair in Systems Biology; Professor of Chemistry:** A. Dean Sherry

**Distinguished Chair in Natural Sciences and Mathematics:** Roderick A. Heelis

**Green Distinguished Chair in Academic Leadership:** B. Hobson Wildenthal


Clinical Professors: Ronald D. Dearing, Natalia Humphreys

Clinical Assistant Professor: Wenyi (Roy) Lu

Clinical Faculty: Katherine (Katie) Donaldson, Floyd Dorsey, Billy Gammons, Pamela Kirkland, Amin Lalani, James (Jim) McConnell, Megan York

Research Professor: Duck Joo (D. J.) Yang

Research Assistant Professors: Monique Duncan, Lan Guo


Academic Advisor and Senior Lecturer: Barbara A. Curry


Associate Professor Emeritus: James L. Carter

Adjunct Faculty from the Research for Mathematics of the Mexican Council and Technology: Jose Gomez-Larranaga, Adolfo (Sanchez) Valenzuela