PROGRAM REQUIREMENTS

Competitive applicants will possess a strong undergraduate background that includes computer science, statistics, and mathematics with additional experience or coursework in a concentration such as biological sciences. Therefore, students who meet the entry recommendations below are at an advantage for acceptance and success in the program. However, we also recognize that students with non-traditional backgrounds, but with keen interest in and motivation toward biomedical informatics, can also succeed in the graduate program. We encourage such students to contact the program director to discuss their background before applying. Plans of study could be designed to remedy undergraduate deficiencies in computational sciences and/or biomedical sciences as needed for individual students.

Applicants who wish to pursue a thesis option should outline their involvement in undergraduate research in their personal statement.

FINANCIAL AID

Applicants will be considered for a partial tuition scholarship. External financial aid is available for domestic applicants.

CONTACT INFORMATION

Dr. Ralph B. D'Agostino, Jr., Program Director
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(336) 716-9410 | rdagosti@wakehealth.edu

Dr. William H. Turkett, Jr.
Associate Professor, Computer Science Department
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Program Assistant
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RECOMMENDED PREREQUISITES INCLUDE:

- Calculus (2 semesters)
- Linear Algebra or differential equations
- At least one introductory statistics course
- Programming experience in a computer language
- Additional programming/computer science background in areas such as data structures, databases, or machine learning is recommended
- Undergraduate coursework in a field of biological science is recommended

READY TO APPLY

(ready.to.apply)

Deadline
- January 15th

Checklist
- Submission of application
- $75.00 Application Fee
- Personal Statement
- Resume or C.V.
- Research Statement - recommended for thesis option
- Transcripts (unofficial acceptable)
- 3 Recommendations

Applicants who wish to pursue a thesis option should outline their involvement in undergraduate research in their personal statement.

http://graduate.wfu.edu/admissions/BMI.html
PROGRAM CURRICULUM

Degree Requirements
All students take a minimum of 36 semester hour credits over four semesters (two years) in the analytical sciences. All students will be required to take 16 hours of courses – 6 hours in biomedical informatics, 6 hours in statistics, and 4 hours of coursework in scientific professionalism and the responsible conduct of research.

An additional 12 hours of elective credit are required by all students. Students completing the project or thesis option will enroll in at least 6 hours of research credit, accumulating a minimum of 34 total credit hours. Students completing the coursework option will enroll in an additional 8 hours of elective coursework, accumulating a minimum of 36 total credit hours.

Electives are offered in a variety of disciplines, including biomedical engineering, clinical and population translational science, computer science, mathematics and statistics, and molecular and cellular biosciences.

For Wake Forest undergraduate students pursuing the 4+1 variant, students would begin the research or project aspects of the program during their senior undergraduate year and/or make use of excess hours beyond the 120 required for graduation with a Bachelor’s degree to pursue courses applicable to the MS degree.

A 4+1 option will allow undergraduate Wake Forest University students to complete an undergraduate degree and the MS in Biomedical Informatics within five years through the incorporation of research and coursework during the student’s senior year.

The complete and current set of requirements for the MS will be described in the Graduate School of Arts and Sciences Bulletin under the Requirements for the Master of Science.

Concentrations
Four areas of specialization, implemented via formal concentrations, are expected:
- Bioinformatics
- Clinical informatics
- Imaging informatics
- Public health informatics

PROGRAM DESCRIPTION
The Master of Science in Biomedical Informatics degree is a full-time, graduate degree option that is designed to train and mentor students to become well qualified scientists and researchers within the domain of informatics as applied to biomedical data.

Students will learn in an interdisciplinary environment the quantitative and analytical methods necessary for understanding, evaluating, implementing, and using biomedical data and information. These methods can be applied to a variety of biomedical fields including imaging, genomics, clinical informatics, and public health informatics.

Graduates from the program will be well positioned to work in the biotechnology, device, and pharmaceutical industries, private and government research labs, and academia.

In additional to completion of the core courses, students will be asked to select one of three available degree completion options.
- Thesis
- Research Project
- Coursework