



» **MASTER OF  
BIOMEDICAL ENGINEERING**



**Wallace H. Coulter Department of  
Biomedical Engineering**



**EMORY  
UNIVERSITY**

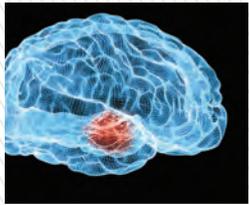
# BIOMEDICAL ENGINEERING

The Wallace H. Coulter Department of Biomedical Engineering is ranked among the best biomedical engineering programs in the nation. Our students are doing cutting-edge research in highly collaborative environments, which is a common element of our team-driven culture. Our research laboratories are dedicated to addressing unmet clinical challenges and have access to superior resources only found in world-class institutions. Students can pursue advanced studies in the areas below.

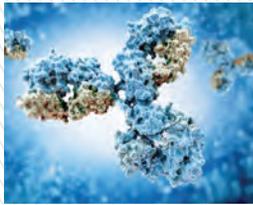


While the U.A. Whitaker Building is home to the Coulter Department, the Roger A. and Helen B. Krone Engineered Biosystems Building (pictured above) also houses BME faculty and laboratories.

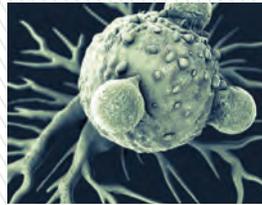
## Coulter Department Research Areas



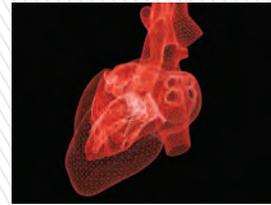
Neuroengineering



Cancer Technologies



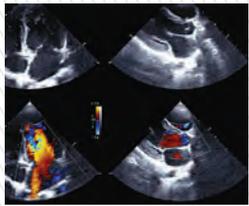
Immunoengineering



Cardiovascular Engineering



Engineering Education



Biomedical Imaging & Instrumentation



Biomedical Informatics and Systems Modeling



Biomedical Robotics



Biomaterials and Regenerative Technologies

» The biomedical engineering master's program (MS BMED) is completed in three (non-thesis) to six (thesis) sequential semesters. Candidates typically take two to four courses each semester.

- Thesis option is oriented towards those contemplating pursuing a Ph.D. in the future.
- Non-thesis option is oriented towards those seeking deeper content knowledge.
- Course credits may transfer to the Ph.D. program (application required).

### Course of Study

#### Thesis Option

(21 hours coursework + 9 hours thesis)

| Courses                      | Credit Hours |
|------------------------------|--------------|
| Bioscience                   | ≥ 3          |
| Engineering                  | ≥ 3          |
| Data science                 | ≥ 3          |
| Approved electives           | 6            |
| Coursework total = <b>21</b> |              |

### Course of Study

#### Non-thesis Option

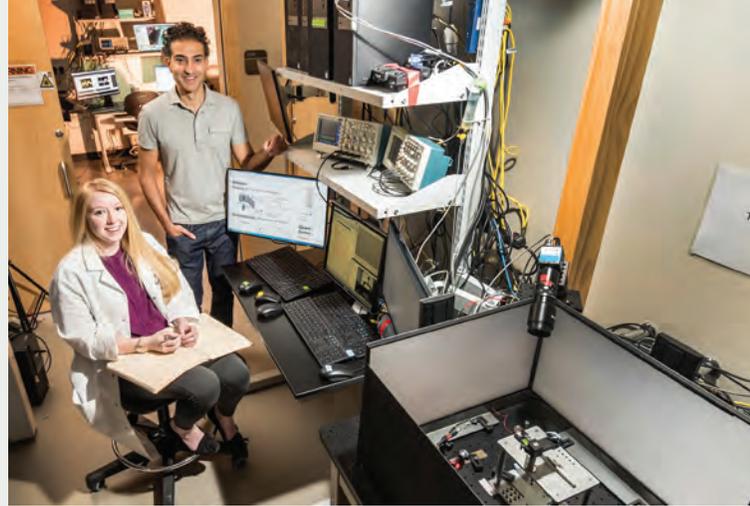
(30 hours coursework)

| Courses                      | Credit Hours |
|------------------------------|--------------|
| Bioscience                   | ≥ 3          |
| Engineering                  | ≥ 3          |
| Data science                 | ≥ 3          |
| Approved electives           | 9            |
| Coursework total = <b>30</b> |              |

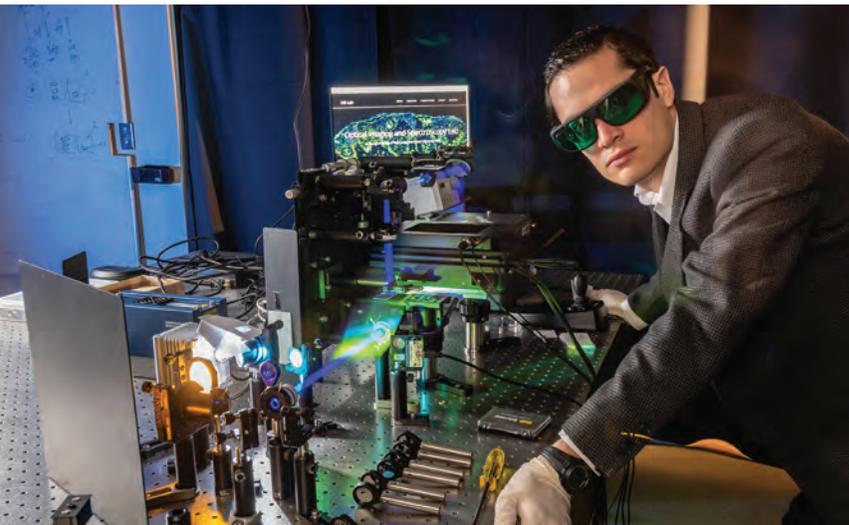
# Master of Biomedical Engineering at a Glance

## Career Paths:

- » Entry into the biomedical industry, or biomedical-related research and development
- » Advancement towards a Ph.D., M.D., or M.D./Ph.D.
- » Target/refocus engineering talent towards the biomedical engineering field



Bilal Haider, assistant professor, working with a graduate student. Haider's research is advancing neuroscience with new discoveries.



Francisco Robles, assistant professor, examines his latest laser configuration. Robles' research is improving imaging with advanced technologies.

## Candidates for this master's program include:

- » Graduates who have earned a bachelor's in engineering, science, or math
- » Working career professionals with an engineering and/or science background

## Atlanta Metropolitan Area Biotech Companies

4P Therapeutics  
Aalto Scientific  
Abeome  
Acella Pharmaceuticals  
Alimera Sciences  
AngioDynamics  
Antibodies Online  
Arbor Pharmaceuticals  
Aruna Biomedical  
Athens Research and Technology  
Atlantic Pharmaceuticals  
AventaCell BioMedical  
Avion Pharmaceuticals  
Biome360  
C.R. Bard  
Cambium Medical Technologies  
Carmel Biosciences  
Cartcept Medical  
Celtaxsys

Clearside Biomedical  
CONMED  
CryoLife  
Dune Medical Devices  
Facet Medical Technologies  
Genesis Biosciences  
GeoVax  
Halyard Health  
HealPros  
Health Discovery Corporation  
Inhibikase Therapeutics  
IQVIA  
Lectenz Bio  
Merial  
Mikart  
MiMedx  
NeurOp  
NeuroTrials Research  
Noramco

Novartis  
Osmotica Pharmaceutical  
Pharma Tech Industries  
ProPharma Group  
QUE Oncology  
Recro Gainesville  
Respironics  
Sanuwave  
Sebacia  
SJ Pharma  
SpherIngenics  
Stryker  
Synexus  
Theragenics  
Vero Biotech  
ViaCyte  
WuXi Apptec

## Our program aims:

- To prepare students for successful careers, whatever their next step;
- To educate students in methods of advanced analysis and appropriate problem solving;
- To provide a depth of knowledge in professionally relevant biomedical engineering fields;
- To provide a breadth of knowledge that fosters interdisciplinary approaches to problem solving;
- To develop the skills pertinent to the research process, including working collaboratively and communicating effectively;
- To prepare for transition to a Ph.D. program if choosing a thesis option



**All admission materials must be submitted via the Georgia Tech graduate admission system.**

**February 1** is the application deadline for entry in the fall semester.

**September 1** is the application deadline for entry in the spring semester.

Applicants should have the following prerequisites:

- B.S. in engineering, science, or math
- One year (two semesters or three quarters) of calculus-based physics
- Organic chemistry (one semester suggested)
- Calculus through and including differential equations (4 semesters total)

» **Apply here: [www.grad.gatech.edu](http://www.grad.gatech.edu)** »

Once submitted, applications are reviewed by the department's faculty admissions committee. Decisions are made on a rolling basis.

CONTACT US TODAY TO FIND OUT MORE ABOUT THIS MASTER'S PROGRAM.

### Recruiting

Master of Biomedical Engineering  
[gradstudies@bme.gatech.edu](mailto:gradstudies@bme.gatech.edu)

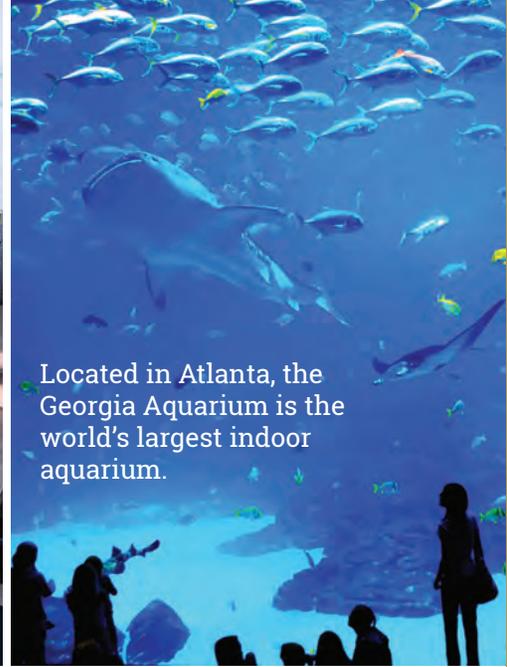
### Essy Behravesh, Ph.D.

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### Pat Jordan

Graduate Program Manager  
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Located in Atlanta, the Georgia Aquarium is the world's largest indoor aquarium.

## ATLANTA: A Thriving Metropolis

Atlanta is an integral and exciting aspect of the Georgia Tech and Emory educational experience. Atlanta is one of the Southeast's most vibrant, progressive, and dynamic cities. When students are not studying, they explore Atlanta's rich and diverse culture through museums, music venues, professional sports teams, shopping districts, and the best cuisine in the south. Atlanta's warm climate allows for year-round outdoor activities. Mountains, lakes, campsites, and hiking trails are all within an hour's drive – and access to Hartsfield-Jackson Atlanta International Airport makes the whole world just a flight away.



Located in one of America's most vibrant cities, Georgia Tech's College of Engineering combines the resources of a major university with the benefits of an urban campus, giving students the tools they need to chase their ambitions. With dozens of degree programs across eight schools, the College has built a strong reputation in the United States and abroad, and graduates leave with skills, knowledge, and global savvy for a world increasingly dependent on engineering.

**Georgia Tech's engineering graduate programs are consistently ranked in the top ten in the nation in their respective specialties according to U.S. News & World Report graduate rankings of national universities granting doctoral degrees.**

# CREATING THE NEXT®



Wallace H. Coulter Department of Biomedical Engineering



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*The Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University affirms our institutions' efforts to increase equity, diversity, and inclusion on our campuses. We strive to create a welcoming, diverse and inclusive environment that values, celebrates, and respects the individual and communal differences that make us human, and aspire to cultivate global leaders in engineering and medicine who are champions of inclusive excellence.*



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