Welcome to Biomedical Engineering at UB!

Jacobs School of Medicine and Biomedical Sciences
School of Engineering and Applied Sciences
In the next 20 minutes, we will cover:

- Curriculum Overview with BME Flowsheet
- Internships and Research
- Clubs
- Resources
- Questions
Biomedical Engineering courses begin your Sophomore year:

- BE 201 - Principles of Biomedical Engineering (Fall)
- BE 202 - Applied Medical and Engineering Biology (Spring)

*These courses are needed for all Junior/Senior level coursework*

Junior Year courses must be completed for all Senior and Technical Elective Courses

- 3 Senior Technical Electives Required- 2 must be BE courses

Senior Design Sequence - full-year, 4th year students only

- Junior Year - Form Teams - project ideas provided (faculty or industry ideas), or provide your own
- Senior Year - End of semester presentation
Tips for Schedule Planning:

- Bookmark the interactive BME Flowsheet: https://www.eng.buffalo.edu/undergrad/advisement/flowsheets/?flow=BE14
  - Course Descriptions can be located by clicking on the course name on the flowsheet.

- Become familiar with the Undergraduate Catalog: http://undergrad-catalog.buffalo.edu/academicprograms/programs/bme.html

- Pay close attention to all announcements sent to your UB email!

- Remember to take advantage of Summer and Winter course offerings to catch up, get ahead, or stay on track!
  - BE 201 & BE 202

- Pre-Health Interest - Planning From Day 1 is Key!
  - Keep constant communication with advisors

- All approved Technical Elective options are listed on our website: http://engineering.buffalo.edu/biomedical/education/undergraduate-programs/ug-current-students/technical-electives.html
Independent Study & Internship For Credit

Independent Study - BE 499

- Individualized guidance from faculty member
- Study particular topic that’s not offered in curriculum
- Request form required
- Department will register (1-3 credit hours)
- To count as Technical Elective - 3 credit hours
- 3 credits = 120 hours of work
- Final Report

Internship - BE 496

- Earn credits for BME degree while applying skills & knowledge in industry position
- Request form required
- Department will register (1-3 credit hours)
- To count as Technical Elective - 3 credit hours
- Each credit hour = 45 hours at Internship
- 2 Progress Reports & Final Report
- Supervisor Evaluation
- Roswell Park Cancer Institute, Catholic Health, UB Research Institute on Addictions, Jacobs Institute, National Institute of Health
Get Involved! Boost Your Resume! 
Expand Your Minds!

- BMES (Biomedical Engineering Society)
- Engineering World Health (EWH)
- WiSE (Women in Science and Engineering)
- Robotics Club
BMES - Biomedical Engineering Society
“Advancing Human Health and Well Being”

- Tours of companies in industry
- Hosting Biomedical Engineering professionals
- Form teams to work on projects - education outreach programs
- BMES Conference - October 5-8, 2016
  - Minneapolis, Minnesota
- Fundraising and attend social events outside of the BME world!

If interested, contact BMES President: Louis Pollenz - louispol@buffalo.edu
Engineering World Health (EWH)

- Corporate Sponsor
  - Involved in custom electronics fabrication for medical devices, military, etc.
  - Offered to help train students with hands on skills needed to work with Medical devices

- Major Goals:
  - Learn new ways to develop and trouble shoot medical devices such as incubators, ultrasound systems, etc.
  - Learn the skills needed to fix medical devices in impoverished 3rd world countries, and send members of the group to places like Africa & Latin America to help with local hospitals (January or Summer)

- Every few weeks: work on projects (building medical device kits), fundraising, hold general member meetings

If interested, contact the EWH President at Buffalo: ewhbuffalo@gmail.com
WiSE (Women in Science & Engineering)

- Dedication to women in the STEM disciplines
- Catalyst: Start your year off WiSE - August 23-24, 2016
- “WiSE and Shine” Breakfast Meetups
- Guest Lecturers
- Brown Bag Lunch Series
- Discovery Seminar: Women in Science and Engineering - 1 credit
- Study Groups

Website: wise.buffalo.edu

Email: wise@buffalo.edu
UB Robotics Club (UBR)

- Dedicated to engineering excellence in the field of robotics.
- Encourage your interests as a BME student - think: prosthetics!
- Robotics can be complimentary to the BME world
- Office and lab in 122 Bonner Hall - so close to home!
- Visit their webpage: www.eng.buffalo.edu/ubr/home

President: Garrett Perard- gsperard@buffalo.edu
Resources

- SEAS Undergraduate Advising: 410 Bonner Hall
  - (716) 645-2775
  - ubengineer@buffalo.edu

- BME Department: 332 Bonner Hall
  - Joelle Donius, Academic Coordinator: joelled@buffalo.edu
  - Dr. Albert Titus, Chair & Director of Undergraduate Studies: ahtitus@buffalo.edu
Questions?