



NYU

POLYTECHNIC SCHOOL  
OF ENGINEERING

ENGINEERING *is...*

## Narrowing *the* Gender Gap through Mentorship

More than a quarter of the aspiring mechanical engineers in the NYU Polytechnic School of Engineering's Class of 2018 are women, and the department has several award-winning female professors to mentor them, particularly in the area of biomechanics. They can join Emilie Dressaire at her new PIF Lab, where they'll learn about systems in which **P**articles, **I**nterfaces, and **F**luids interact in fascinating ways, or Alesha Castillo, who is working to gain a better understanding of how the body responds to mechanobiological cues. Another female professor, Vittoria Flamini, focuses on soft tissue mechanics, medical device development, and multi-physics and multi-scale modeling in cardiovascular physiology. Together, they're making the Department of Mechanical and Aerospace Engineering a female-friendly and forward-thinking part of the School of Engineering.

# Mechanical Engineering Highlights *at* the NYU School of Engineering

- Joo H. Kim is developing custom-tailored exoskeletons for those with lower-limb disabilities, soldiers in the field, or anyone who has to carry heavy loads long distances.
- Wieqiang Chen is using glass plates with nanoscale topography to capture and examine tumor cells circulating through the bloodstream—a discovery that could one day take cancer right out of circulation.
- Maurizio Porfiri is creating bio-inspired robotic fish that can swim alongside live specimens, allowing for unprecedented studies of piscine behavior.
- Each tenured or tenure-track professor in the department brings in an average of \$350,000 in research support, for these projects and many more.



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