

Train for the coming quantum revolution

QUANTUM 2.0

at IWU

A letter from an IWU physics student:

Look at the photo below taken at the annual physics picnic on the Illinois Wesleyan quad. There are students from each year with interests and research ranging from condensed matter physics, quantum computing, astrophysics, mechanical engineering, optical physics, materials sciences, electrical engineering, green energy, and everything in between. At right you can see pictures of us doing work for our classes, for our labs, for our own research, and for our clubs. Since my arrival I have been exposed to concepts about the physical world I would not have been able to conceptualize upon my arrival. Due to the quality of the laboratory instruction at IWU, we have all been afforded the opportunity to grapple with the forefront of what we do not yet understand.

On that note, you may be wondering what we mean by Quantum 2.0. The entire semiconductor industry and the full gamut of computing and communications technologies are made possible due to our understanding of quantum mechanical properties. However, these technologies don't exploit the weirdness of quantum mechanics—entangled states. There is a coming quantum revolution where we will learn to exploit these concepts, and we invite you to come learn with us. Most of us might have heard of entangled states, but I have actually created them. In our course on quantum optics, for example, we create entangled photons so that each student can get a chance to prove to themselves that they are real, physical things—not just mathematical constructs.

One of the things I most appreciate about the physics department at IWU is that all of the professors consistently encourage and nurture my interests. Each time I've expressed an interest in something, my professors have supported me wholeheartedly. It is a fantastic environment to develop understanding and interest in all walks of physics.



DEPARTMENT OF

PHYSICS

About IWU Physics

In the top 7% of physics degree producers nationwide out of undergraduate only institutions

Concentrations in:

- Astrophysics
- Optics
- Quantum Computing

Exceptional post-graduation placement | 100% for many consecutive years

e.g. Apple, Facebook, Raytheon, Northrop Grumman

Equal emphasis on all 3 ways of doing physics:

- Experimental
- Theoretical
- Computational

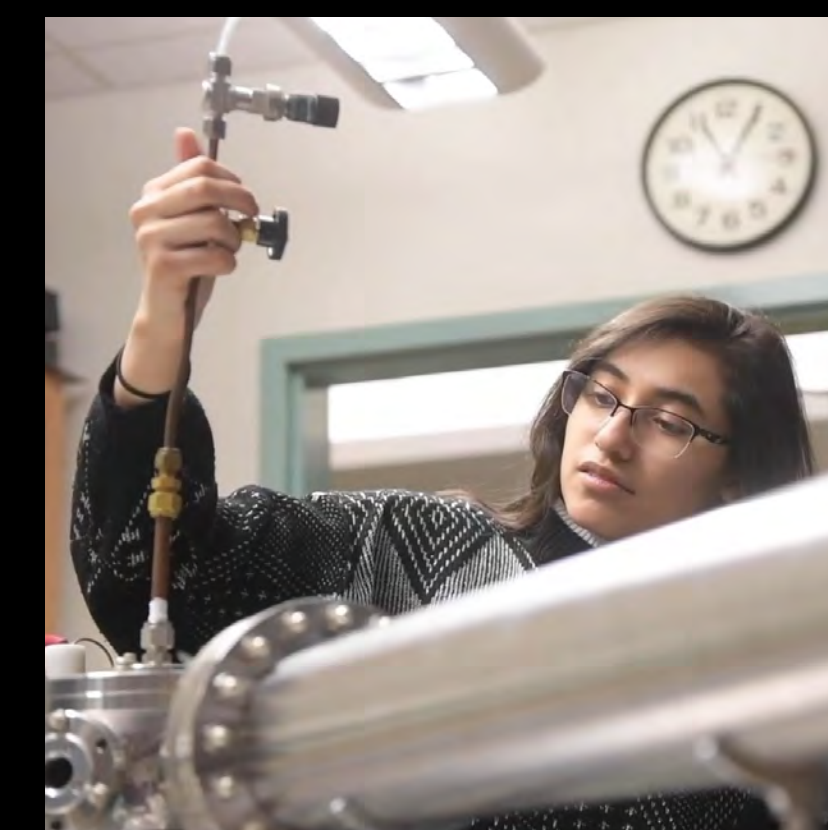
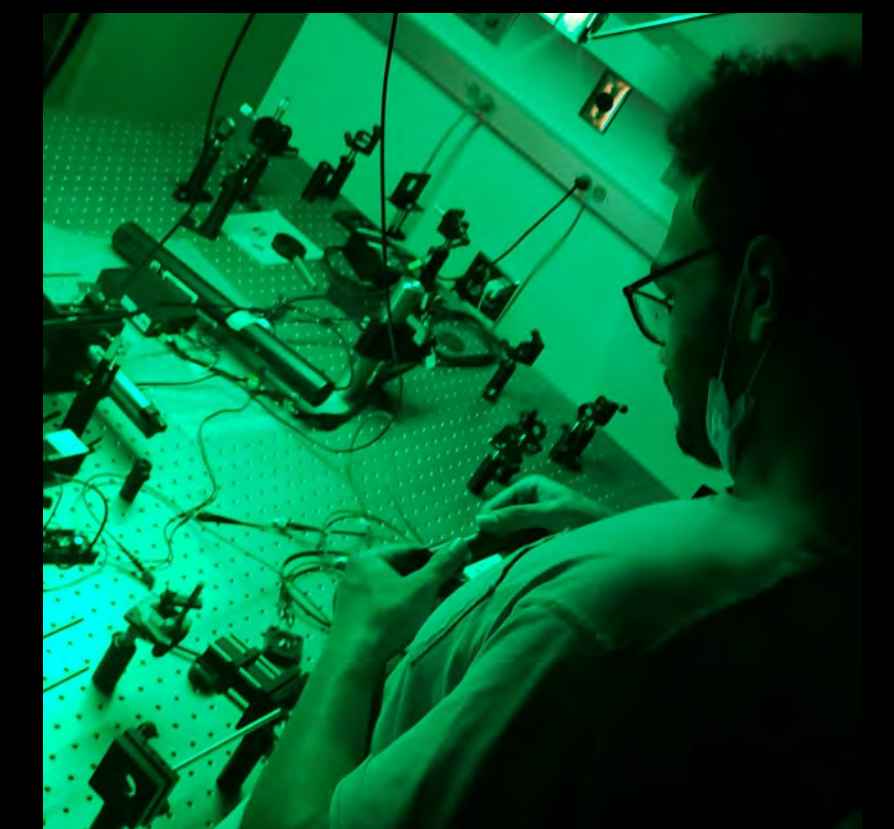
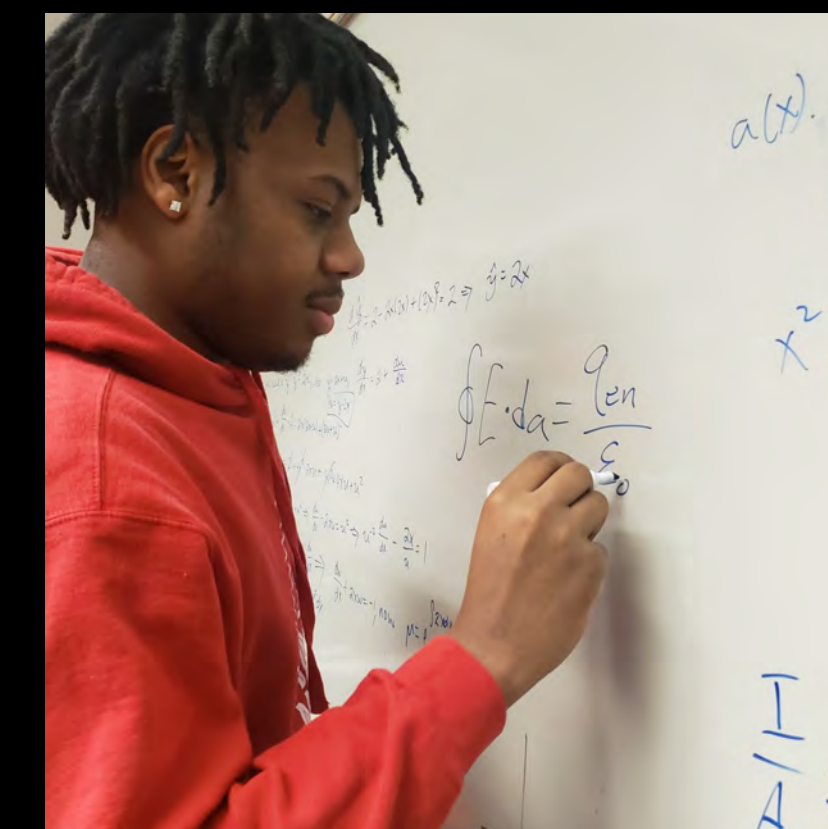
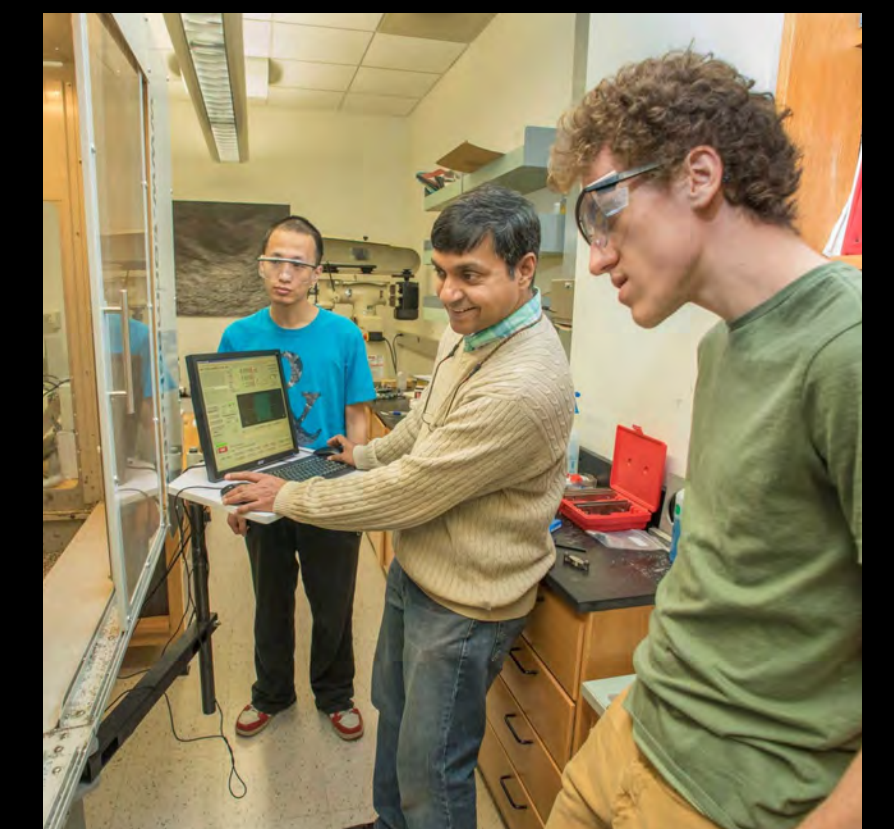
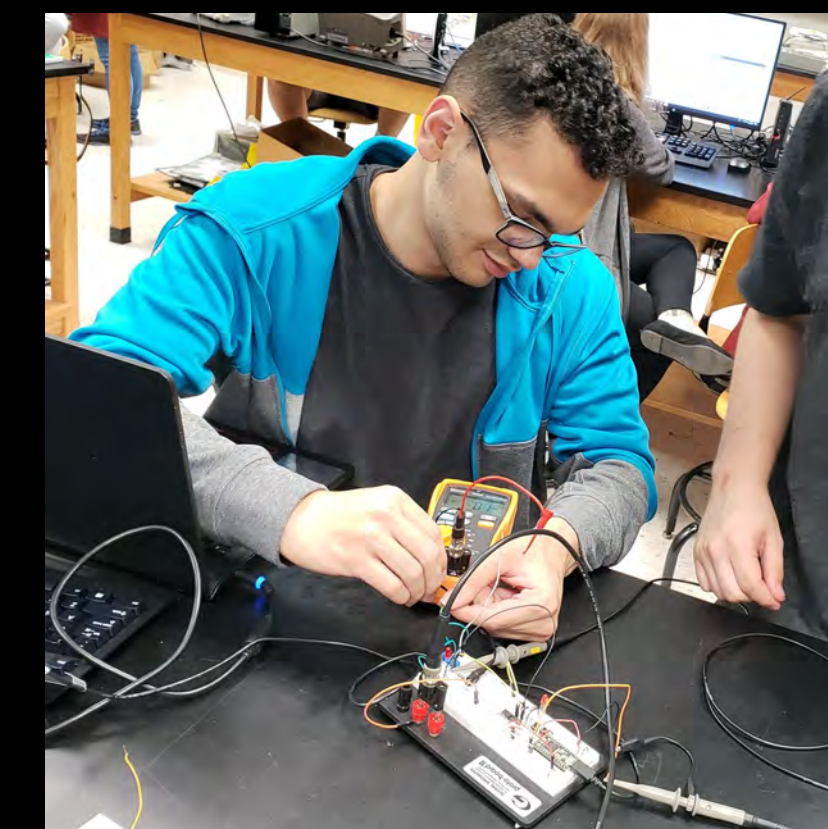
Three alumni have been co-authors with Nobel laureates

Scholarship opportunities

- Special scholarships for McLean County students
- Scholarships to support undergraduate summer research

Active student clubs:

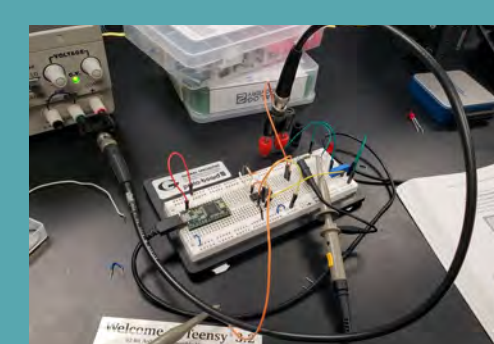
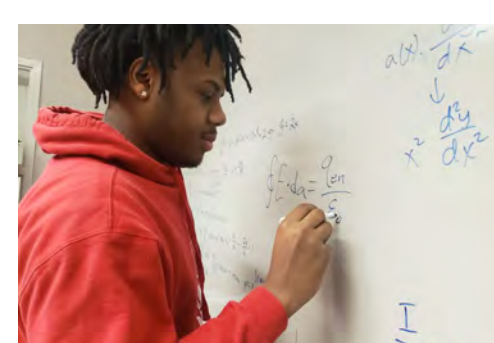
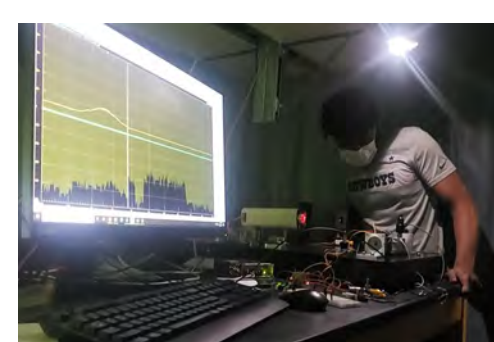
- SPS (Society of Physics Students)
- SPIE (Society of Photo-Optical Instrumentation Engineers)
- IEEE (Institute of Electrical and Electronics Engineers)



ILLINOIS WESLEYAN UNIVERSITY 

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Why join
W
Physics?



ILLINOIS WESLEYAN UNIVERSITY **W**
DEPARTMENT OF
PHYSICS

1 concentrations

- Astrophysics
- Optics
- Quantum Computing

2 quantum 2.0

Train for the coming quantum revolution in Physics and Technology!

3 ways of doing physics

- Experimental
- Theoretical
- Computational

4 placement

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5 Nobel laureates

3 alumni have been co-authors with Nobel laureates

6 scholarships

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8 student clubs

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