# PHYSICAL SCIENCES Industry Guide

# **Overview**

Whether using quantum physics to study black holes, applying principles of material chemistry to polymers and solar cells, or tackling complex algorithms, students in the physical sciences investigate the physical world and innovate upon new fields to impact science and society. With a strong grasp of scientific principles as well as analytical, technical, and laboratory skills Physical Sciences students succeed in industry careers and at top graduate school programs. Each year, about 65% of UChicago Physical Science graduates accept industry jobs while 35% continue their education in a PhD or Master's program.

## **FIRST THINGS FIRST**

Get started with these resources and stay up-to-date on physical sciences events and internships!

- Explore Metcalf opportunities in Handshake to find paid, substantive internships around the world.
- Sign up for Career Advancement's STEM newsletter to get regular updates on events and opportunities.

## **TRY IT OUT**

Short-term experiences are a great way to explore career paths, start building your resume, and meet mentors.

- Job shadow with an alum working in quantum innovation, aerospace, renewable energy, and more!
  - Winter Break Job Shadowing (Dec. 15-19): Apply by Nov. 10
  - Spring Break Job Shadowing (Mar. 16-20): Apply by Feb. 17
- <u>Apply for a Physical Sciences career trek</u> to meet employers. Upcoming treks include trips to Shanghai and Beijing,
   China as well as New York, NY; San Francisco, CA; and Los Angeles, CA.
  - Winter Break Treks (Dec. 15-19): Apply by Oct. 13
  - Spring Break Treks (Mar. 16-20): Apply by Jan. 20
- Sign up for <u>Metcalf Clinic</u> to work on a 2-week employer project with a team of peers. Applications for the Fall Climate & Energy Clinic open Sept. 26 and close Oct.8.
- Join the Fall Quarter **Trek to Argonne National Lab** to learn about the the various kinds of research being done at the facility and connect with researchers and recruiting team members. Applications open in early Oct.

# **BUILD YOUR SKILLS**

Whether you're a beginner or already have some experience with research, analysis, or in the field, UChicago offers many resources to help you build your skills and stand out in the job market.

- <u>Get involved with research</u> and work with a faculty member in the Physical Sciences Division. Attend the <u>STEM</u> <u>Campus Research Workshop</u> on Oct. 8 to learn more about finding a campus research opportunity.
- Participate in the National Lab Application Bootcamp on Oct. 21 to learn how to develop your strongest application.
- Enhance technical skills with UChicago courses or supplemental training through **Udemy**. UChicago students can access customized learning pathways and learn new skills on-demand. **Request access here.**
- <u>Take classes</u> to build expertise in physical science fields this could include Molecular Mechanisms of Human Disease, The Chemistry of Big Problems, Environmental History of the Earth, or Statistical Methods and Applications.

### **GET EXPERIENCE**

Get relevant hands-on experience by interning with UChicago employer partners such as:

- Industry: Abbott, Amazon, Apple, Aurora Energy Research, Cargill, Cornerstone Research, DRW, EPIC Systems, Facebook, Field Museum, Goldman Sachs, Google, HRL Laboratories, IBM, JP Morgan Chase, Meta, Microsoft, Moderna, Quantinuum, Salesforce, Stripe, United Airlines, Wells Fargo
- **Government Agencies:** Center for Disease Control, Department of Energy, Environmental Protection Agency, FBI, National Institutes of Health, NASA, State Department
- Research Institutions: Argonne National Lab, CERN, Fermi Lab, Fred Hutch Cancer Center, Marine Biological Laboratory, CERN, RISE DAAD, Scripps Research Institute,

## FIND OPPORTUNITIES

There are many strategies to find jobs and internships, including applying for posted positions and creating your own opportunity through networking. These resources can help you find opportunities and networking contacts

- Attend employer information sessions to network with recruiters
- Get personalized support from a Careers in Physical Sciences adviser
  - **Tara Ford** has provided specialized career support to physical science majors for over 10 years helping students secure opportunities with industry-leading employers and top-ranked graduate schools.
  - Alyssa Nelson, PhD has a background in computational chemistry and is an expert advisor for students exploring
    careers across physical science fields.
- <u>Use the UChicago Alumni Directory</u> and other tools like LinkedIn to reach out to alumni at your target employers

# **EVENTS**

#### Fall Quarter

- Sept. 29 | Fall Career Fair
- Sept.30 | UChicago Grad Programs Fair (4+1 Advanced Scholars program)
- Sept. 30 | Meet the UChicago Champions Employer Networking
- Oct. 8 | STEM Research Campus Employment Event
- Oct. 13 I Hack the Tech Recruiting Process
- Oct. 20 | Alumni in Mathematics Career Panel
- Oct. 21 | National Lab Application Bootcamp
- Oct. 29 | Climate Frontiers Career Fair
- Nov. 3-4 I Chicago Quantum Summit
- Nov. 3-14 | Fall Quarter Climate & Energy Metcalf Clinic Program
- Nov. 10 | Tech Recruiter Panel
- Nov. 11 | Aerospace Industry Panel
- Nov. 13 | Trek to Argonne National Lab
- Dec. 8 I Careers in Engineering Alumni Panel
- Dec. 15-19 | Winter Break Treks including:
  - Beijing & Shanghai, China Climate & Innovation
  - Berlin & Frankfurt, Germany STEM & Startups
  - Los Angeles, CA Quantum & Engineering
- Dec. 15-19 | Winter Break Job Shadowing

#### Winter Quarter

- Jan. 15 I STEM Recruiting Night
- Jan. 27 I Careers in Chemistry Alumni Panel
- Feb. 2-13 | Climate & Energy Winter Metcalf Clinic
- Feb. 6 | Leadership Conference
- Feb. 19 | Google Chicago Office Trek
- Feb. 25 I Quantum Employer Spotlight
- Mar.16-20 | Spring Break Treks including:
  - New York, NY Climate & Energy
  - San Francisco Bay Area Tech & Al
- Mar. 16-20 | Spring Break Job Shadowing

# **Spring Quarter**

- Mar. 28-29 Uncommon Hacks Hackathon
- Mar. 31 | Chemistry Lab Tours
- Apr. 6-17 | Climate & Energy Spring Metcalf Clinic
- Apr. 14 | World Quantum Day
- Apr. 17 | Digital Assts Trading Competition
- Apr. 28 | Internship Best Practices Workshop

# **UPCOMING DEADLINES**

## **Fall Quarter**

- Sept. 29 | Rural Innovation Challenge
- Oct. 8 | Fall Climate & Energy Metcalf Clinic
- Oct.10 | Argonne National Lab Trek
- Oct. 13 | Winter Break Treks
- Nov. 3 | Fall Deadline: 4+1 Programs
- Nov. 10 | Winter Break Job Shadowing
- Nov. 20 | Winter Tech Showcase
- Dec. 1 I Winter Climate & Energy Metcalf Clinic

#### Winter Quarter

- Jan.12 | Winter Deadline: 4+1 Programs
- Jan. 14 | Google's Chicago Office Trek
- Jan. 20 | Spring Break Treks
- Jan. 20 I Spring Climate & Energy Metcalf Clinic
- Jan. 25 | Digital Assets Trading Competition
- Feb. 17 | Spring Break Job Shadowing

## **Spring Quarter**

- Apr. 13 | Spring Deadline: 4+1 Programs
- Apr. 15 | Selective Career Cohorts
- May 17 I Summer Tech Showcase

# PHYSICAL SCIENCES EVENT SPOTLIGHTS



There are many pathways open to students studying the physical sciences. Don't miss these great events for for students specifically interested in:

Chemistry
Climate & Energy
Math
Physics
Quantum



# Thomas Sheppard, AB'24

Major: Math and Philosophy Involvement: Quantum Research and Industry Analyst at Duality; ILC Entrepreneurship and Technology Club

Post-Graduation Plans: Director of Data and Analytics at Great Lakes Crystal



# Kyla Mullaney AB'24

Major: Astrophysics Involvement: Research on-campus, minors in Media Arts and Design and Science Communication, and involvement in student film with Maroon TV.

Post-Graduation Plans: Post-baccalaureate researcher at NASA Goddard with CRESST