MELLON COLLEGE OF SCIENCE (MCS)

MCS undergraduates are breaking the boundaries of science.

PROGRAMS

**Biological Sciences**
- Biological Sciences (BA or BS)
- Biological Sciences and Psychology (BS)
- Biological Sciences/Neuroscience Track (BS)
- Neuroscience (BS)

**Chemistry**
- Chemistry (BA or BS)
- Chemistry/Biological Chemistry Track (BS)

**Mathematical Sciences**
- Computational Finance (BS)
- Mathematical Sciences (BS)
- Mathematical Sciences (Computational and Applied Mathematics) (BS)
- Mathematical Sciences (Discrete Mathematics and Logic) (BS)
- Mathematical Sciences (Operations Research and Statistics) (BS)
- Mathematical Sciences (Statistics) (BS)
- Mathematical Sciences and Economics (BS)

**Physics**
- Physics (BA or BS)
- Physics/Applied Physics Track (BS)
- Physics/Astrophysics Track (BS)
- Physics/Biological Physics Track (BS)
- Physics/Chemical Physics Track (BS)
- Physics/Computational Physics Track (BS)

**Intercollege**
- Bachelor of Science and Arts (BSA)
- Science and Humanities Scholars Program (SHS, joint with DC)

INTERDISCIPLINARY PROGRAMS

The Science and Humanities Scholars Program enables talented students to develop an undergraduate curricular program that builds upon their interests and achievements in the humanities, natural sciences, mathematics or social sciences. The Health Professions Program guides students interested in medicine, dentistry or other health professions in their course choices and as they apply for professional degree programs.

**GRADUATED CLASS – SPRING 2018**

179 GRADUATED CLASS

- Biological Sciences 24%
- Mathematical Sciences 42%
- Chemistry 14%
- Physics 20%

MCS Admitted Student Averages

<table>
<thead>
<tr>
<th>SAT-ERW*</th>
<th>SAT-M*</th>
<th>ACTE</th>
<th>ACTM</th>
<th>ACTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>720-770</td>
<td>780-800</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Rank 5% GPA 3.92

*Middle 50% range

**Popular Freshman Courses**

- Molecular Tools for Biologists and Chemists
- Putnam Seminar
- MCS Freshman Seminar: EUREKA
- Phage Genomics Research
- Matter & Interactions

More than 70% of undergraduates conduct cutting-edge research. Create new knowledge. Advance their fields. Publish results.

**FACULTY**

130 FACULTY*

- Biological Sciences 22%
- Mathematical Sciences 26%
- Physics 27%
- Chemistry 22%
- Interdisciplinary 3%

**Notable Faculty**

- **Alison Barth**, professor of biological sciences, is a recipient of the Society for Neuroscience’s Research Award for Innovation in Neuroscience. Barth is an inventor of technologies that are advancing the field of brain research.
- **Po-Shen Loh**, assistant professor of mathematical sciences, is the academic director of the United States Mathematical Olympiad program and national lead coach of the U.S. team. He’s also founder of the crowd-sourced science and math education website Expii.com.

*Pittsburgh undergraduate research and teaching track faculty
GRADUATE SUCCESS

Employed 46%
Grad School 33%
Not Reported 6%
Other 5%

200 GRADUATES IN 2017*

*Percentages recorded as of January 2018

Alumni Accomplishments

Mathematical sciences 2018 graduate Joshua Brakensiek, who was a Goldwater Scholar and Putnam Fellow during his undergraduate studies, received an NSF Graduate Research Fellowship to continue his studies in math and computer science at Stanford.

Christina Cabana, a 2018 chemistry graduate and Science and Humanities Scholar, will pursue a master’s degree of philosophy in chemistry at the University of Cambridge under a Gates Cambridge Scholarship. Cabana received a Goldwater Scholarship when she was an undergraduate at MCS.

Biological sciences 1990 graduate Glen de Vries founded a company, Medidata, that's helping the health care and drug industries do better science. Medidata brings data analytics and artificial intelligence into play and is now keeping track of more than 8 billion clinical records for more than 2 million patients, with 1,400 more patients being entered into its system daily.

CORE EDUCATION

1. MCS's revolutionary Core Education program educates students as scholars, professionals, people and citizens and creates well-rounded young scientists uniquely prepared to enter the workforce or pursue further education.

2. The EUREKA! Discovery and Its Impacts seminar equips first-year students with foundational knowledge, skills and perspectives that support their development as emerging scientists.

3. The PROPEL seminar prepares juniors for their impending transitions into professional life with lectures on science and society, entrepreneurship and innovation, and professional development.

4. The ENGAGE requirements help students to become well-rounded individuals by engaging in the arts, wellness and service throughout their time at Carnegie Mellon.

PREPARING STUDENTS TO BE 21ST-CENTURY SCIENTISTS:

• Scholars: deeply trained in their disciplines
• Professionals: adept at communicating and accustomed to working in multidisciplinary teams
• Persons: with a sense of wellness and balance
• Citizens: actively involved and globally engaged

Student Startups

> Emerald Cloud Lab, founded by biological sciences 2005 grad D.J. Kleinbaum and computational biology 2005 grad Brian Frezza is revolutionizing the biotechnology industry by using robotics to make laboratory experiments more efficient and precise.

Top Employers

Google
NIH National Institutes of Health
Goldman Sachs
Deutsche Bank
citibank
amazon

RESEARCH

Astrophysics and Cosmology

The universe holds many secrets, including what makes up dark matter and dark energy. Researchers at the McWilliams Center of Cosmology are leaders in astrophysical research, playing important roles in projects including the Large Synoptic Survey Telescope project and the Sloan Digital Sky Survey.

Climate Science

The air is full of tiny particles that form both naturally and from human actions. Researchers at Carnegie Mellon are at the forefront of identifying how these particles evolve as they travel through the atmosphere and the impact they have on cloud formation, rainfall, climate and human health.

Nucleic Acids Science

The Center for Nucleic Acids Science and Technology pairs biology and chemistry to study nucleic acids. The center is a leader in the development of synthetic nucleic acids and has created new technologies, including gene editing techniques, that are being developed for the treatment of disease.

cmu.edu/admission

Choose your program
Change the world

October 2018