Accelerated 4+1 Pathways

Fu Foundation School of Engineering and Applied Science

The School of Engineering and Applied Science (SEAS) 4+1 Pathway provides Barnard undergraduates the opportunity to earn a Master of Science degree in one of five main areas of concentration:

- Industrial Engineering and Operations Research (IEOR) (Barnard major: Economics & Math)
- Computer Science (CS) (Barnard major: Computer Science)
- Chemical Engineering (Barnard major: Chemistry)
- Biomedical Engineering (Barnard major: Biochemistry or Chemistry)
- Civil, Electrical or Mechanical Engineering (Barnard major: Physics)

Successful completion of a SEAS pathway provides Barnard students with quantitative and engineering skills that are essential to a wide variety of roles and industries. All of the SEAS pathways take careful planning from as early in your Barnard career as possible. Students are encouraged to meet with Beyond Barnard and academic advisors as soon as possible to assess the available pathways and begin making an academic plan.

The Accelerated 4+1 Pathways allow students to combine an undergraduate liberal arts education at Barnard with a master’s degree at one of the world’s preeminent research universities. Application fees and GRE requirements are waived for Barnard students. Students admitted to the Accelerated 4+1 Pathways have access to Beyond Barnard advising and special events hosted for their cohorts. Questions can be directed to beyondbarnard@barnard.edu.
Fu Foundation School of Engineering and Applied Science

**Application Open:** 09/01/2021  
**Application Close:** 02/15/2022  
**Required GPA:** 3.5  
**Standardized Tests:** Waived

Number of CU credits taken **year four:** 6-12  
**Total number of CU credits required:** 30-36

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<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
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<td>Beyond Barnard Info Sessions</td>
<td>Meet with Beyond Barnard Advisor</td>
<td>Meet with Barnard Faculty</td>
<td>Complete Barnard and Pathway Prerequisites</td>
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<td>Request Letters of Recommendation</td>
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<td>Complete Application Materials</td>
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<td>Apply Online</td>
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<td>Gain Admission to 4+1 Pathway</td>
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<td>Start Taking Classes at SEAS</td>
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<td>Matriculate Fully into SEAS</td>
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**What questions do students ask of BB, Faculty, and CU partners?**

**Beyond Barnard**
- How do the possible pathways fit with your academic interests and career goals?
- What are the application requirements and timeline?
- Application support, including soliciting recommendations & reviewing your resume and personal statement

**Barnard Faculty Advisors**
- Review your academic progress - how will you finish your requirements at Barnard?
- Discuss majors, minors, and other academic goals as they relate to 4+1
- How will you complete SEAS requirements in years 4 and 5?

**Columbia Advisors**
- What is the curriculum for the particular SEAS pathway and what are the requirements for each concentration?
- Questions about application logistics
- How can I explore possible career pathways a SEAS degree can open up?