



GRADUATE PROGRAM IN  
**PHARMACEUTICAL  
MANUFACTURING**

*MASTER OF SCIENCE  
GRADUATE CERTIFICATES*



[STEVENS.EDU/GRAD-PM](http://STEVENS.EDU/GRAD-PM)



**STEVENS**  
INSTITUTE of TECHNOLOGY  
THE INNOVATION UNIVERSITY®



## MASTER OF SCIENCE IN **Pharmaceutical Manufacturing**

The Master of Science in pharmaceutical manufacturing at Stevens Institute of Technology is designed for industry professionals and those looking to work in the pharmaceutical, biotech and nutraceutical industries. The program provides advanced knowledge to help students boost their careers at companies that manufacture pharmaceutical, biotechnology, cosmetics and personal care products. You will gain a thorough understanding of federally regulated good manufacturing practices (GMPs) in processes, facilities and validation. And you'll develop the skills you need to be a leading innovator while gaining an understanding of the communication and teamwork necessary for working in regulated manufacturing environments.



Stevens' full-time faculty and instructors have extensive professional accomplishments in the pharmaceutical industry and bring a wealth of experience to their teaching. All classes are offered both on campus and online and there is close and intense collaboration between students and faculty. Stevens is ideally situated near the heart of the nation's pharmaceutical industry, which provides students with abundant professional networking opportunities.



## POSSIBLE CAREERS

- Compliance Associate
- Manufacturing Associate
- Packaging Engineer
- Pharmaceutical Engineer
- Process Engineer
- Senior Quality Analyst
- Quality Analyst
- Quality Engineer
- Quality Manager
- Validation Engineer
- Validation Specialist



## TOP HIRING ORGANIZATIONS

- Regeneron
- Johnson & Johnson
- Novartis
- Roche
- Bristol-Myers Squibb
- Merck
- Gilead
- Amgen
- Pfizer



## CURRICULUM

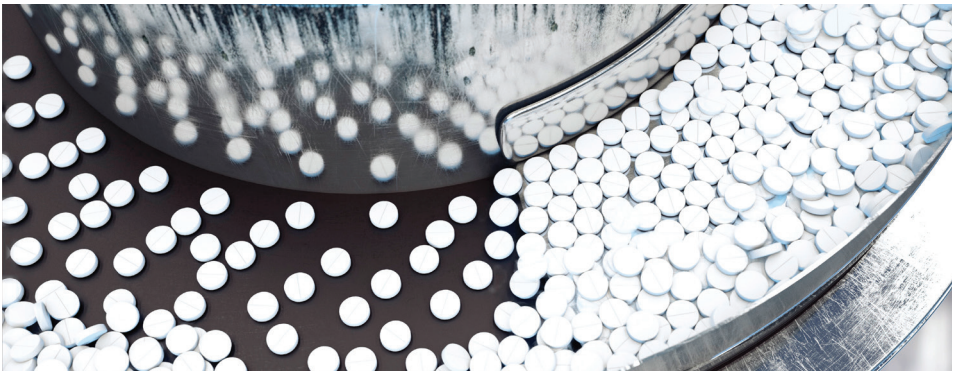
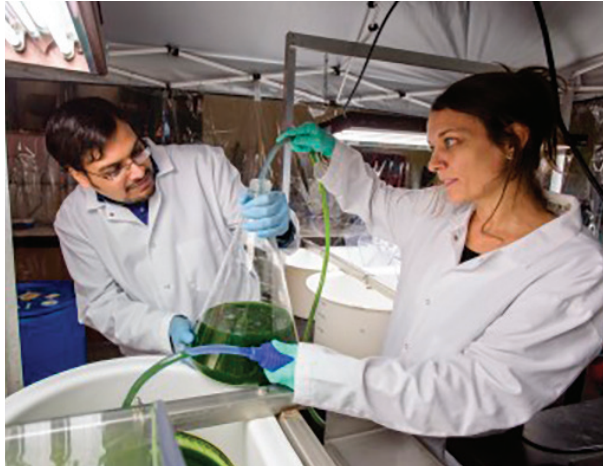
The Master of Science in pharmaceutical manufacturing program requires completion of 30 credits — five mandatory foundation courses and five elective courses.

### CORE COURSES INCLUDE

- Introduction to Pharmaceutical Manufacturing
- Good Manufacturing Practices in Pharmaceutical Facilities Design
- Validation in Pharmaceutical Manufacturing
- Quality in Pharmaceutical Manufacturing
- Statistical Methods in Pharmaceutical Manufacturing

### ELECTIVE COURSES INCLUDE

- Validation of Computerized Systems
- Global Regulation and Compliance in the Pharmaceutical Industry
- Manufacturing of Biopharmaceutical Products
- Manufacturing and Packaging of Pharmaceutical Oral Solid Dosage Products
- Manufacturing of Sterile Pharmaceuticals



## EARN YOUR DEGREE ONLINE

Built for busy professionals intent on furthering their careers, StevensOnline offers the same level of excellence with maximum flexibility. Ranked in the top 25 in the U.S. for “Best Online Graduate Engineering Programs,” the master’s degree in pharmaceutical manufacturing is fully available through our award-winning online platform.

You’ll study with the same distinguished pharmaceutical manufacturing faculty — all with significant real-world experience — and benefit from Stevens’ reputation for innovation and excellence while earning your degree in a top online engineering program.



## ONE-YEAR MASTER’S DEGREE PROGRAM

Fast track your pharmaceutical manufacturing master’s degree with online courses through the one-year master’s program.

Working professionals can add value to their resume quickly by earning their master’s degree online in as little as one year, and recent graduates can enter the job market sooner by taking courses year round.

Although you can begin taking courses in any semester, the program can be completed in one calendar year by starting with two online courses in the summer semester, followed by four courses either online or on campus in both the fall and spring semesters.



## GRADUATE CERTIFICATE PROGRAMS

Stevens also offers two four-course graduate certificates in pharmaceutical manufacturing (PM) and in validation, compliance and quality (VCQ). In most cases, courses may be used toward an undergraduate or graduate degree program. Each graduate certificate program is a self-contained, highly focused collection of courses carrying 12 credits. The selection of courses may be adapted to a student’s professional interests. Inclusion of graduate certificate credits toward a master’s program requires pre-approval by your academic advisor.

- Pharmaceutical Manufacturing
- Validation, Compliance and Quality

The pharmaceutical manufacturing graduate program is administered by the mechanical engineering department. Most of the courses offered under the program are also cross-listed with chemical engineering and can be taken as elective courses under the chemical engineering program.

## WHO SHOULD APPLY

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We welcome applicants who are seeking the skills and knowledge to advance their careers and have a drive to innovate. You can apply with an undergraduate degree in engineering, natural sciences or pharmacy.

Application requirements include:

- Bachelor's degree, with a minimum GPA of 3.0, from an accredited institution
- Official college transcripts
- Two letters of recommendation
- Resume (optional)
- Statement of purpose (Ph.D. program only)
- TOEFL or IELTS scores (for international students)
- GRE scores

## ABOUT STEVENS INSTITUTE OF TECHNOLOGY

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Stevens Institute of Technology is a premier, private research university situated in Hoboken, New Jersey overlooking the Manhattan skyline. Since our founding in 1870, technological innovation has always been the hallmark and legacy of Stevens' education and research. Within the university's three schools and one college, 6,900 undergraduate and graduate students collaborate closely with faculty in an interdisciplinary, student-centric, entrepreneurial environment. Academic and research programs spanning business, computing, engineering, the arts and other fields actively advance the frontiers of science and leverage technology to confront our most pressing global challenges. The university is consistently ranked among the nation's elite for return on tuition investment, career services and the mid-career salaries of alumni.

## ABOUT SCHAEFER SCHOOL OF ENGINEERING & SCIENCE

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The Charles V. Schaefer, Jr. School of Engineering & Science (SES) is dedicated to preparing the next generation of technology leaders by offering a multi-disciplinary, design-based education. With nine departments and an intensive curriculum for undergraduates, master's and doctoral candidates, SES is dedicated to supporting hands-on learning, research and technology transfer that provides each student with invaluable, experiential knowledge. SES is globally recognized for its world-class faculty and leading-edge research facilities.



### CONTACT INFORMATION:

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