MANHATTAN COLLEGE CHEMICAL ENGINEERING

CHEMICAL ENGINEERING AT MANHATTAN COLLEGE

The Master of Science (M.S.) degree program in Chemical Engineering emphasizes practice-oriented knowledge, detailed engineering analysis and design. The program enhances a student's base of knowledge and prepares students for leadership roles in chemical engineering practice. The curriculum offers traditional graduate courses as well as a diverse selection of electives taught by industry leaders throughout the New York Tri-State Area. We offer a unique program which allows students to specialize in one of our concentration areas (see below) or a general chemical engineering masters degree. The Masters degree can be completed with or without a research thesis option.

The program can be completed in-person or completely virtual/online.

Graduates from our program are highly sought by employers because they are experienced problem solvers with strong analytical, management, and communication skills.



Consumer Products & Cosmetic Engineering

Within this specialization, the program offers: Formulations I and Formulations II – these two courses develop the knowledge and skill set necessary to conduct effective formulation design and engineering of complex fluids to develop products for the cosmetic and consumer industry. Additional courses include: Emulsion and Polymer Technologies, Advanced Processing Techniques, and Industrial Regulations and Quality.

Biopharmaceutical Engineering

Within this specialization, the program offers: Industrial Practice in Pharmaceutical Industry – an advanced study of the principles used for pharmaceuticals production with an emphasis on physiochemical processes governing development and manufacturing of pharmaceutical agents and drugs. Additional courses include: Manufacturing of Pharmaceutical Products, Bioseparations, and Biological Reaction Engineering.

Principles & Processing of Novel Materials

Within this focus area, the program offers: Production and Application of Biomaterials - encompasses the field of study focusing on producing porous, often proteinaceous, materials which can host living organisms, a therapeutic or diagnostic procedure. Additional courses include: Additive Manufacturing, Thin Film Deposition Techniques, and Polymers and Emulsions

RESEARCH OPPORTUNITIES

Qualified M.S. students can obtain for credit and/or paid research assistantships (in-person only) leading to participation in regional and national competitions and conferences - valuable learning experiences for a career in research and development or pursuit of doctoral degree.

LOCATION - THE NEW YORK CITY ADVANTAGE

Many colleges and universities can boast about their proximity to New York City, but at Manhattan College we offer a truly unique location. Located in the historic neighborhood of Riverdale, we are within the boundaries of New York City and our campus is one block

away from the City's expansive subway system. Unlike many other New York City schools, we have a true college campus, while only 35 minutes from midtown Manhattan. The Manhattan College chemical engineering program's 60+ year history and location within New York City benefit students through the program's professional connections within and beyond the tristate area.



Faculty

S. Varanasi, Ph.D., Chairperson (State University of New York at Buffalo)

J.P. Abulencia, Ph.D., Graduate Director (Johns Hopkins)

G. J. Maffia, D.E. (Dartmouth College), MBA (NYU)

R.F. Carbonaro, Ph.D. (Johns Hopkins), P.E.

A. Suresh, Ph.D (Univ. of Connecticut) W. Abdullah, Ph.D. (Columbia Univ.)

C. Bilchak, Ph.D (Columbia Univ.)

FOR MORE INFORMATION

website: http://manhattan.edu/

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Graduate Guide (2023) Chemical Engineering Education