

# Professional M.S. Program

The Professional Master's Program provides students from both chemical engineering and non-chemical engineering undergraduate backgrounds the opportunity to supplement their education with a curriculum that prepares them for success in industry. The Professional M.S. Program provides students with the technical skills they would acquire in a traditional MS program, while also developing skills needed in industry, such as leadership and management skills, business and financial skills, oral and written communications, teamwork, and defining and managing projects.

DEGREE	LENGTH	FORMAT	TOTAL FEES	REQUIREMENTS
MASTER OF SCIENCE IN CHEMICAL ENGINEERING	ONE-YEAR PROGRAM AUGUST & JANUARY STARTS	FULL-TIME, ON-CAMPUS 3-SEMESTERS	RESIDENT: \$ 13,895 NON-RES /INT'L: \$ 37,398	GRE SCORES 2 RECOMMENDERS

## PROGRAM HIGHLIGHTS

**12-Month Program** Students take a combination of advanced technical and management courses, earning a Master's of Science in Chemical Engineering.

**Specially Tailored Coursework** Students choose from 6 concentration areas to gain specialized knowledge suited to their interests and goals.

**Real-World Problem Solving and Innovation** Students work with industry leaders and our world-renowned faculty on a 6-credit hour capstone project.

**Advanced Professional Development Programs** Students receive one-on-one counseling and career development to prepare for success at Purdue and beyond.

**Career Catalyzation** Most graduates enter careers in diverse fields, often on advanced leadership tracks, while some students pursue further education, such as a PhD or MBA.

**FOR MORE INFORMATION:** [engineering.purdue.edu/che/masters](http://engineering.purdue.edu/che/masters)

Davidson School of Chemical Engineering Graduate Offices

(765) 494-7343 | [chegrad@purdue.edu](mailto:chegrad@purdue.edu)



Davidson School of  
Chemical Engineering

# Davidson School of *Chemical Engineering* Professional M.S. Program

## CURRICULUM

- 30 total credits required
- 6 core Chemical Engineering credits
- 9 concentration area selective credits
- 9 business/management credits
- 6 capstone research credits

## CONCENTRATIONS

- Biochemical Engineering
- Data Science in Chemical Engineering
- Energy Systems Fundamentals & Engineering
- Gas & Petroleum Engineering
- Kinetics, Catalysis & Reaction Engineering
- Pharmaceutical Engineering
- Polymer Science and Engineering

## FALL, SEMESTER 1\*\*

- Statistical Methods in Chemical Engineering
- Industrial Marketing Management
- Concentration Area Courses

Total Credits: 12

## SPRING, SEMESTER 2

- Transport Phenomena
- Financial Analysis & Management of Projects
- Operations Management or Strategic Management
- Concentration Area Courses

Total Credits : 12

## SUMMER, SEMESTER 3

- Chemical Engineering Capstone Project

Total Credits: 6

\*\*students starting in January will begin the program with the spring curriculum and finish with the fall curriculum

## PROGRAM RANKINGS

**Purdue produces the most graduate engineers** of any U.S. public research university - PEDS data (2017)

**Best Value University** - The Princeton Review (2020)

**#8 Engineering graduate program in the U.S.** - U.S. News & World Report (2020)

**#8 most employable public university graduates in the U.S.** - Times Higher Education (Nov. 2018)

**#11 (tie) university internship/co-op program** - U.S. News & World Report (Sept. 2019)

## STUDENT PROFILE

"The ChE Professional M.S. Program capstone project allows students to take full ownership of a real-life problem and develop a solution while navigating timelines, priorities, and stakeholders. This project also requires students to work on diverse teams, which is an invaluable experience as they head into the workplace. Overall, the capstone project is a fantastic leadership experience." *Zachary Rinaldi (MSChE '17)*



Learn more: [engineering.purdue.edu/che/masters/alumni](http://engineering.purdue.edu/che/masters/alumni)

## PLACEMENT

**Employment:** 94% Graduate Employment Rate\*

**Salary:** \$82,000 average starting salary

### Employers:

3M  
BASF  
Bechtel  
Catalent  
Cook Biotech  
Dow Agro  
Dow Chemical Company  
DuPont  
Eli Lilly and Company  
Emerson  
ExxonMobil  
Intel  
LyoHUB  
McKinsey & Co.  
National Key Laboratories  
Pacific Northwest National Laboratory  
Unilever  
Whirlpool Corporation

### Roles:

Chemical Engineer  
Energy Engineer  
Operations Engineer  
Product Development Engineer  
Production Engineer  
Process Engineer  
Program Engineer  
Systems Engineer  
Analyst (Research, Data, Energy, etc.)  
Associate Scientist  
Consultant  
Chemist

*\*Data based on self-reported information from respondents to our 2019 graduate survey*

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