

Missouri University of Science and Technology

Chemical and Biochemical Engineering – Graduate Track Pathway –

November 17, 2023

GTP Recruitment Strategies

Team: Dr. J.-C. Wang (Associate Chair) and Kevin Walkup (Professional Advisor)

Digital and In-Person Advertisement

- ▶ Information session and preregistration advising (Wang & Walkup) every semester
- ▶ Email campaign and student chapter events (Wang)
- ▶ Open-door career advising service (Wang)

Enlisting Assistance from Graduate Students and Faculty

- ▶ Many GTP students were undergraduate researchers
- ▶ Graduate students are TAs and/or lab mentors to potential GTP students
- ▶ Undergraduate research can be continued to become MS project and be given with financial support

GTP Email Campaign

MS Study in Chemical Engineering and Graduate Track Pathway (GTP)



Benefits with a MS degree

- > Set you apart when you apply for various positions and earn earlier promotions.
- > Deepen your knowledge and improve the quality of your work.
- > Stay up-to-date with the latest emerging technology.
- > Get more specialized in certain area to enable change of career direction.
- > Can be completed within 1 year and via different options
- > And yes, salary benefits too! Engineers with MS degrees have median salaries 9%-13% higher than the median salaries of their counterparts with a BS alone (U.S. Bureau of Labor Statistics)



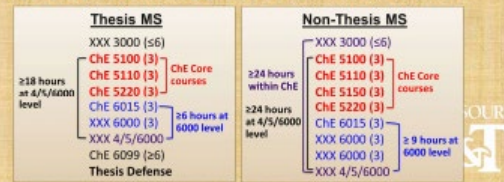
Graduate Track Pathway (GTP) in ChBE@MS&T

- > Up to 6 credit hours of 5000-level or above ChE courses to be counted for both BS and MS degrees as "shared credit".
- > Dual status to allow additional MS courses to be taken before completion of BS degree and at lower tuition rates.
- > Possible admission to a different, non-ChE MS program
- > Non-thesis MS completable within two semesters and thesis MS within three semesters/terms beyond BS.
- > Application:
 - 3.50 cumulative GPA in ChE courses and 3.0 overall GPA,
 - last year until 30 days before completing BS,
 - admitted right away (summer too!)
- > Interested? Contact Dr. Wang, jcwang@mst.edu; 573-341-6705; 210H Bertelsmeyer Hall



MS (30 Credit Hours): Thesis vs. Non-Thesis

- > Thesis option: 6-8 lecture courses (18-24 lecture hours) + research project (6-12 research hours) + thesis (writing, teamwork, defense, etc.).
- > Non-thesis: 10 lecture courses, doable via distance/online sessions/courses while working full time, at your own pace up to six years, earning graduate certificate(s) of interest.



Status of GTP in Chemical and Biochemical Eng.

- ▶ 1st GTP student (FS20, Elizabeth Lemieux, Non-thesis MS, FS21)
- ▶ 2nd GTP student (FS20, Joseph Johnston, Thesis MS, SS22)
- ▶ 3rd GTP student (FS20, Kyle Boillat, did not pursue)
- ▶ 4th GTP student (FS21, Nawaf Altwaijra, Non-thesis MS, SP23)
- ▶ 5th GTP student (FS21, Brittney Hahn, Non-thesis MS, SP23)
- ▶ 6th GTP student (SP23, Lavanya Bhargava, Thesis MS)
- ▶ 7th GTP student (FS23, Matthew McLaughlin, Non-thesis MS)
- ▶ 8th GTP student (FS23, Annika Francisco, Non-thesis MS)

Efforts to Expand GTP Program

- ▶ Enhance current recruitment activities
- ▶ Utilize senior courses, such as ChE 4311 Professional Practice And Ethics, as additional advising and advertising platform
- ▶ Work with other departments, such as Engineering Management, to appeal to more students
- ▶ Add Bioengineering MS as a new option in near future

Assistance

- ▶ Campus-wide celebration events to showcase success stories
- ▶ GTP Newsletter to all undergraduate students
- ▶ Tuition incentives