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## Preface

Welcome to the Chemical Engineering Department at The University of Toledo! We are glad you chose to pursue a graduate degree with us. We know the transition to graduate school can be difficult and will work with you to make it as smooth as possible.

We feel our program is excellent. We admit only those students with outstanding GPAs, letters of recommendation, GRE scores, and TOEFL scores. Obviously, you are one of these students.

Faculty members are known worldwide as leaders in their respective research areas. They will provide you with the opportunity to work on projects at the cutting-edge of technology.

The staff is outstanding. They will provide tremendous support in your pursuit of a graduate degree.

This handbook serves as a general reference to all graduate students in our program. It contains important information relevant to your life as a graduate student. Please read it carefully. Note that none of the information supersedes that provided in the Graduate School Bulletin.

Numerous forms are referred to in the handbook. You can readily identify the title of a form by its Courier Font: for example, Sample Form. These forms are available in the Chemical Engineering Office.

We update the handbook on a regular basis. However, since the program changes with time, some of the information may become incorrect or irrelevant. We will communicate any changes to you through the mail. Please make these changes in your handbook as you receive them.

Best wishes on your path toward a graduate degree!

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## **Chemical Engineering Department History**

The University of Toledo (UT) started as The Toledo University of Arts and Trade with a gift of land from Jesup W. Scott in 1872. Twelve years later, the university became a municipal institution partially supported by the city of Toledo. In 1967, The University of Toledo became a member of the state university system of Ohio.

The College of Engineering began as the Manual Training School in 1872. This school evolved into the Polytechnic School, the College of Industrial Sciences, and finally the College of Engineering. The College of Industrial Sciences offered the first two years of engineering study in 1915 and a three-year program in the 1920's. The College of Engineering emerged in 1931 offering a four-year degree program, a Bachelor's of Engineering, housed in the *then newly completed* University Hall.

The Chemical Engineering Department originated in 1946 as one option in the Bachelor's of Engineering program. Tremendous growth in the Engineering College led to the establishment of separate departmental curricula in 1950 including a Bachelor's of Chemical Engineering. The Chemical Engineering program received accreditation from the Accreditation Board for Engineering and Technology (ABET) and the American Institute of Chemical Engineers (AIChE) in 1964.

Graduate studies began in 1912 at The University of Toledo. One year later, the first graduate degree was conferred by the University. The Engineering College began offering graduate studies in 1949. A number of Master's programs were developed in the 1950's with conferral of the first M.S. in 1954. A college-wide Doctoral program began in 1967 with specialization in one of four interdepartmental areas (Chemical and Biological Transport, Engineering Mechanics, Electronics and Energy, and Systems Theory and Engineering) administered by interdepartmental committees. Individual departments took over management of the Doctoral program in 1995 and now determine degree requirements.

The Chemical Engineering Department conferred its first Master's degree in 1964 and first Doctoral degree in 1972. Initially, the Department focused on part-time Master's level education for local industry and the NASA-Lewis Research laboratories. This focus has shifted to full-time Master's and Doctoral education which continues to this day.

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# **Graduate Courses**

The following Chemical Engineering classes are currently listed in the Graduate School Catalog:

All full-time students must register for CHEE 5930 Seminars in Chemical Engineering and attend all departmental seminars.

- CHEE 5410 New Separations
- CHEE 5800 Polymer Science & Engineering
- CHEE 5930 Seminars in Chemical Engineering
- CHEE 6010 Green Engineering Principles
- CHEE 6110 Green Engineering Applications
- CHEE 6120 Biofuels
- CHEE 6500 Advanced Chemical Reaction Engineering
- CHEE 6510 Advanced Chemical Engineering Thermodynamics
- CHEE 6550 Transport Phenomena I
- CHEE 6560 Transport Phenomena II
- CHEE 6860 Polymer Laboratory Methods
- CHEE 6920 Chemical Engineering Project
- CHEE 6960 Master's Research & Thesis
- CHEE 6970 Graduate Industrial Internship
- CHEE 6980 Special Topics in Chemical Engineering
- CHEE 7930 Seminars in Chemical Engineering
- CHEE 8010 Green Engineering Principles
- CHEE 8110 Green Engineering Applications
- CHEE 8120 Biofuels
- <u>CHEE 8500 Advanced Chemical Reaction Engineering</u>
- <u>CHEE 8510 Advanced Chemical Engineering Thermodynamics</u>
- <u>CHEE 8550 Transport Phenomena I</u>
- CHEE 8560 Transport Phenomena II
- CHEE 8860 Polymer Laboratory Methods
- CHEE 8960 Doctoral Research & Dissertation
- CHEE 8980 Special Topics in Chemical Engineering

All classes are not offered each year; some are offered alternating years while others are offered only upon sufficient student demand. Note that **Master's students** should register for research under **CHEE-6960** while **Doctoral students** register under **CHEE-8960**.

Required classes for Master's students are highlighted in **bold**; required classes for Doctoral students are highlighted in **bold and underlined**. See the Master's and Doctoral degree sections for other requirements.

Courses beginning with 5 are for both Masters and Doctoral students while courses beginning with 6 are for Masters only and courses beginning with 8 are for Doctoral only.

# <u>TOP</u>

# Admission, Status, and Advising

# Application for Admission

Applications for Graduate School must be submitted online at apply.utoledo.edu. Select application to the College of Graduate Studies. To receive full consideration, applications for Fall admission must be received prior to January 15. A complete application consists of:

- A complete application form.
- A set of transcripts from each institution attended showing degree obtained.
- Three (1 3) letters of recommendation; these may be sent with the application or sent separately to the Graduate School. Be sure the letters include your name and proposed academic plan. If desired, recommendation forms are available from the Graduate School.
- Applicants from an accredited U.S. or Canadian university with a cumulative grade point average (GPA) less than 2.7 and all international applicants from non-English speaking countries must submit Graduate Record Examination (GRE) test scores; contact Graduate Record Examinations, P.O. Box 6000, Princeton, NJ 08541-6000, (609) 771-7670 for information regarding test times and locations.
- All international applicants from non-English speaking countries must submit Test of English as a Foreign Language (TOEFL) scores; contact TOEFL/TSE Publications, P.O. Box 6154, Princeton, NJ 08541-6154, (609) 771-7100 for information regarding test times and locations.
- All international applicants must provide an original bank statement (copies not accepted) of financial support six months prior to the intended semester of enrollment; some students may receive a commitment for financial support that supersedes this requirement. In either case, the student will receive an I-20 from the International Student Office.
- A \$45 application fee (\$75 for international students) in the form of a check, money order payable to *University of Toledo* or credit card. This fee is non-refundable.

Students should send submit completed applications either through the College of Graduate Studies website (<u>https://www.utoledo.edu/graduate/prospectivestudents/</u>).

# Evaluation of Applications

Applicants to the graduate program in the Chemical Engineering Department must meet certain minimum educational requirements. These requirements were established to help ensure that students can successfully complete degree requirements. The specific requirements are:

- a B.S. degree in Chemical Engineering; applicants with a B.S. degree in other areas are encouraged to apply but may be required to complete preparatory coursework prior to regular admission. Students without a B.S. degree in chemical engineering must submit GRE scores;
- a 2.7 or higher accumulated GPA for all previous undergraduate academic work;
- for all applicants from an accredited U.S. or Canadian university with an undergraduate GPA less than 2.7 and all international applicants from non-English speaking countries, GRE scores must be submitted with quantitative GRE scores exceeding 155; and

• for all international applicants from non-English speaking countries, a minimum TOEFL speaking score of 22 (or a minimum IETLS speaking score of 6.5).

Applicants for the Doctoral program must have: either a Master's degree in Chemical Engineering or related area or a B.S. degree in Chemical Engineering; and a grade point average of 3.0 or higher. Students with Bachelor's degrees seeking direct admission to the doctoral program must also have demonstrated a high level of academic performance.

All admission decisions are made by the Graduate School based on the recommendation of the Chemical Engineering Department. The Graduate School may deny admission to any students that do not meet all of the above admission requirements. Additionally, the Department may deny admission if additional students cannot be supported by the Department.

Students that fail to satisfy these requirements may apply for admission to the Engineering College as an undergraduate with a degree (UWD) to remediate deficiencies and prepare themselves for admission to the Graduate School. Students that do not meet the above requirements may also submit other evidence of their academic potential for consideration.

Once accepted, students may delay admission for up to **two (2) semesters**. After two semesters (including the summer semester), students must resubmit an application for admission. Students receiving offers of financial support may delay admission but will forfeit their financial support as stated in the offer letter.

## Transfer of Credits

Students may transfer credit for graduate work completed at other accredited institutions in partial fulfillment of degree requirements subject to approval by the Graduate Director and the Graduate School. A letter grade of "B" or higher is required in each class.

As a rule, Master's students cannot transfer more than 10 semester hours and credit cannot be given for thesis work. Doctoral students with a Master's degree can transfer no more than 30 semester hours and credit cannot be given for comprehensive exams, qualifying exams, or dissertation work.

Students should consult with the Graduate Director about transfer of credit. Students enrolled at the University that wish to take courses elsewhere to transfer for credit must receive advance approval.

### Student Classification

Upon admission, a student is placed in one of the following categories:

- <u>Regular</u>: students that are fully qualified to undertake a degree program, based on required documentation, as determined by the Graduate Director and Associate Dean of Graduate Studies.
- <u>Provisional</u>: students that at the time of application have not completed all requirements for admission. The student must fulfill outstanding admission requirements by the end of the first semester of attendance at which time the Graduate Director will change the student's status from provisional to regular. If the

requirements are not fulfilled, the Graduate School terminates the student's admission.

- <u>Non-Degree</u>: students that possess a Bachelor's degree and wish to take graduate courses for specific personal reasons but not pursue a graduate degree. If a student subsequently decides to pursue a degree, the student may apply up to 8 graduate credit hours earned as a non-degree student to the degree requirements.
- <u>Graduate Special Student</u>: students that wish to explore graduate studies without deciding on a degree program. A simplified application form exists for admission with this status. Students may remain with status for a maximum of one calendar year or until they have accumulated 21 credit hours, whichever comes first. If a student subsequently decides to pursue a degree, the student may apply up to 8 graduate credit hours earned as a graduate special student to the degree requirements.
- <u>Undergraduate Special Student</u>: students that are seniors in the Chemical Engineering Department that do not have a full schedule and wish to take classes for graduate credit. Students that do so may register for no more than a total of 10 credit hours. Special application forms must be filed prior to the beginning of the semester in which the classes are taken and require *unusual scholastic ability*.

Students wishing to change their status may petition the Graduate Director in writing. If approved, the student must file a Status Change Request form with the Graduate School.

#### Maintaining Status

To maintain regular student status, students must comply with all academic regulations of the University and specific requirements of the Chemical Engineering Department. The student is solely responsible for ensuring compliance and satisfying degree requirements. Students should consult their primary research advisor or the Graduate Director if questions arise regarding these requirements.

Students must maintain: 1) a 3.0 GPA for all courses completed and 2) a 3.0 GPA for all courses completed in the Chemical Engineering Department. Any student with an assistantship that fails to maintain a 3.0 GPA will have one semester to raise it to the minimum level. Failure to do so will result in termination of the assistantship. If a student's GPA falls below the minimum for two consecutive semesters, the student is subject to suspension or termination from the Chemical Engineering Department.

Academic dishonesty may result in loss of regular student status and dismissal from the program. The Graduate Policy (<u>https://www.utoledo.edu/policies/academic/graduate/</u>) define dishonesty and gives its most common forms of manifestation. Students that engage in unprofessional or other activities detrimental to the Chemical Engineering Department may also be subject to dismissal. All dismissal decisions require a majority vote of the faculty and approval of the Graduate School.

### Advising

The Graduate Director advises all graduate students until they select a permanent faculty advisor. Students that elect to pursue a coursework Master's do not select an advisor and remain under the guidance of the Graduate Director.

During their first term of residence, Master's and Doctoral students will select a permanent advisor through the following process:

- Faculty members present potential research topics and advise students of current funding status at the start of Fall semester
- Students submit a list of their top three preferred projects, in order of preference, by the deadline specified by the Graduate Director
- The Department determines graduate student advisors that as closely as possible match both student preferences and department needs
- The Graduate Director announces graduate student advisors by the end of the Fall Semester

Once students are assigned to faculty advisors, a student cannot switch advisors without written permission from all faculty members involved. The student must submit in writing a request for the proposed change, the reason for it, and a Status Change Request form to the Graduate Director. The Graduate Director will only approve such a request when the change is absolutely necessary. Valid reasons for changing advisors include:

- The being unable to perform research in their original advisor's lab for documented health reasons
- The original advisor leaving the university or otherwise being unavailable to advise the student
- The advisor is no longer able or willing to financially support a student who was initially accepted with stipend support

The faculty advisor is responsible for guiding the student toward satisfactory completion of degree requirements. In particular, the advisor must:

- Approve the student's Plan of Study and all revisions. The Plan of Study must also be approved by the Graduate Director and the Graduate School
- Approve registration forms
- Approve thesis or dissertation committee members. The committee must also be approved by the Graduate Director and the Graduate School
- Guide the student during thesis or dissertation research

Ultimate responsibility for completion of degree requirements, though, falls on the student.

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# **Financial Assistance**

# Types of Assistance

Financial assistance is available for students through a variety of mechanisms. These include:

- <u>Tuition Scholarships</u> (TS)
- <u>Teaching Assistantships</u> (TA)
- <u>Research Assistantships</u> (RA)

The **TS** covers instructional fees (tuition) only, up to 9 hours per semester, for a twosemester period. All courses must be a part of the student's Plan of Study. The student must pay instructional fees for all other courses; exceptions require a written request by the student's advisor. In all cases, the student is responsible for all other fees such as the general fee and engineering fee (which add up to about \$1000 per semester) and their health insurance premium (which ranges between roughly \$2,200 and 3,500 per year depending on the health insurance plan the student chooses).

Teaching (**TA**) and Research (**RA**) Assistantships include a **TS** and a stipend. The stipend ranges from approximately \$19,100 to \$24,700 annually for a 12-month appointment.

Students receiving a **TA**, graduate teaching assistantship, in addition to a TS will either participate directly in teaching a class or provide related support activities. The experiences that accompany such assignments are integral to a student's graduate education. The student will be better prepared to meet degree requirements and develop professionally after serving as a teaching assistant.

Students receiving a TA should expect to devote up to 20 hours per week in their teaching efforts. TA appointments are usually for a nine (9) month period at a fixed rate determined by the College of Engineering and usually are not continued beyond the initial appointment.

The Chemical Engineering Department receives a limited number of TAs from the college each year for assignment by the Graduate Director. We anticipate using these TAs to support first year graduate students but some appointments will be made by Graduate Director, in consultation with the Department Chair, to fulfill Department needs. Additional TAs may be available outside of the Department, for example through the College Computing Office and the University Library; see the Graduate Director for more information.

Some students will receive a **RA** in addition to a TS. A graduate research assistant participates in externally funded research guided by a faculty member. The faculty member will determine specific responsibilities but the student should expect to participate in a multitude of research activities.

RA appointments are for a twelve (12) month period. Continuation of support is contingent on the availability of funds and the student's progress toward fulfilling degree requirements.

Graduate students should inquire about the availability of RAs with individual faculty members, especially during the advisor selection process. The student's advisor will make all decisions regarding level and continuation of support.

### Professional Expectations of Teaching and Research Assistants

<u>Graduate students supported on **TA** and **RA** appointments are employees and, thus, must exhibit the high levels of professionalism expected of University of Toledo personnel. As such, their performance will be regularly evaluated. TA performance will be assessed (in writing) twice per semester (i.e., after the first 4 – 6 weeks of the semester and at the end of the semester), and continued TA support is contingent on satisfactory performance reviews. Requirements for satisfactory TA performance include:</u>

- courteous treatment of students and colleagues
- accurate and timely grading of student work
- assisting students during TA office hours
- if required by the instructor, attending class and assisting with classroom activities
- assisting students in the laboratory
- if needed, assisting instructors with course material development
- informing the instructors ahead of time if the TA must be absent or late
- other duties as assigned by the instructor

Similarly, students with RA appointments will be assessed in writing at least annually. This assessment will be based on: (1) the expectations stipulated in their employment contract for each term, and (2) the student making satisfactory progress toward completing their thesis or dissertation. Like the TA support, continued RA support is contingent on satisfactory performance reviews. Requirements for satisfactory RA performance include:

- engaging in continuous and substantial research effort
- complying with the research supervisor's instructions on the scope of work and research methods
- demonstrating technical competence and knowledge of technical literature in their research field
- regularly communicating their research activities and findings to their supervisors
- adhering to the ethical standards of their profession
- following safety regulations and reporting safety incidents (both major and minor)
- assisting their supervisors and (if requested by their supervisors) others in researchrelated tasks
- maintaining the laboratory equipment placed in their care
- treating research colleagues with courtesy
- informing their supervisors (and other affected parties) ahead of time of any absences or tardy arrivals
- other duties as assigned by their supervisors

RAs and TAs who excel in their duties are eligible for special recognition through College of Engineering and University awards. Conversely, students who fail to satisfy the above expectations and receive a written warning may be dismissed from employment. These disciplinary actions may be appealed by submitting a written grievance to the Graduate Director and Department Chair.

### English Language Test for Teaching Assistants

Ohio State law requires that all assistants who provide direct instruction (i.e., lecture) in a classroom or laboratory be tested for English proficiency before assuming their assistantship responsibilities. The test is administered during Graduate Student Orientation prior to the start of the Fall Semester or by special arrangement with the Graduate School. Appointments can be made by calling the Graduate School. The test consists of a ten minute presentation which includes:

- a short, personal introduction
- a short introduction to the course which you might teach, testing methods, grading, attendance and homework requirements, lecture vs. discussion, etc.
- a short sample lesson from a course you might teach

TAs that provide only teaching support, such as grading and record keeping, and do not lecture are *not required* to take this test.

# *Outside Employment*

Students Receiving a TA or RA: Because students are expected to be working full-time toward a degree, they may assume no additional employment other than that associated with a TA or RA appointment. This restriction does not apply to students receiving a TS only.

Exceptions to this policy must be recommended by the student's advisor and approved by the Graduate School prior to employment. We will approve exceptions only if employment does not delay or disrupt the student's progress toward a degree. The Request for Employment Outside of Graduate Assistantship Duties form is available from either from the Graduate Director or the Graduate School.

Students Receiving a TS only: Students may work up to 20 hours per week either on or off campus during terms that they receive a TS. Employment requires approval by International Services who issue the necessary work permits. The income provided by these jobs covers most of a student's basic expenses.

All on-campus job openings are posted in room 1532 of the Student Union, the Career Services Office ((419) 530-4341). Students generally have little difficulty finding a position. Employment opportunities include:

- On-campus food service operations
- University, Law, or Scott Park Library
- Student Recreation Center
- Print Shop
- Parking Services
- Bookstore
- Tutoring
- Computer Laboratories
- Intramurals students referee intramural athletic games
- Notetaking students take notes for handicapped students

## Payroll

Prior to receiving a paycheck, students receiving either a TA or a RA must check in with the department secretary and:

- complete a Graduate Assistant Appointment Request Form
- obtain a Social Security Number (SSN)
- complete an I-9 form
- complete payroll and PERS exemption forms
- set up direct deposit
- file appropriate local, state, and federal forms

The Graduate Assistant Appointment Request Form is available from the Department Secretary. International students can obtain a SSN at either of the following locations:

Social Security Administration 4906 Monroe Street, Suite A Toledo, Ohio 43623 Social Security Administration Four Seagate 10th Floor, Suite 1000 Toledo, Ohio 43604

International students should make an appointment with the International Student Programs Office to execute an I-9; U.S. citizens should see the Department Secretary. Payroll and tax forms are available in the Payroll Office, UH 2300.

Paychecks are available from the Secretary in the Departmental Office every other Friday. If pay day is a holiday, paychecks are available the last work day prior to the holiday.

## Other Sources of Financial Aid

A limited number of additional financial aid sources exist. The Graduate School can provide an exhaustive list of these opportunities.

We encourage Chemical Engineering students pursuing a Ph.D. to consider applying for a University Fellowship. Although preference is given to first year students with exceptional academic records, any student may apply for these highly competitive awards. Please consult with your advisor if you are uncertain whether you should apply.

Graduate students that have completed most of their degree requirements may apply for a Board of Trustees Scholarship to cover instructional fee costs. Applications are available from the Graduate School.

Graduate students are also eligible to apply for federal need-based financial aid. Details about such loans are available from the Student Financial Aid Office.

## Tax Status

Tax authorities consider stipends compensation for services rendered. Therefore, TAs and RAs are subject to federal, state, and local taxes. To determine tax status, students should obtain the appropriate tax forms from the Internal Revenue Service, Ohio State Tax Board, and appropriate local taxation entities. These forms are generally available online, in post offices and public libraries. Students should file all tax forms no later than April 15 and preferably earlier in the year.

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## **Student Records and Registration**

### Plan of Study

Upon assignment of research advisors, students should prepare a Plan of Study. In the Plan of Study, students propose the coursework and research credits they will use to fulfill degree requirements and a time frame for completion of all degree requirements. Students must have the plan approved by their advisor and the Graduate School prior to receiving a

degree and preferably by their first summer of residence. Any changes to the plan require completion of a Plan of Study Course Substitution form and require approval by the faculty advisor, Graduate Director, and Graduate School.

# Notice of Thesis and Assurance of Compliance and Notice

All graduate students must submit a Notice of Thesis form and an Assurances of Compliance with Applicable Federal and State Regulations Governing Research form to the Graduate School. Ideally, students complete these forms after assignment of research advisors and students determine their specific research project. However, students *must* complete these forms prior to engaging in any research activity.

The compliance document indicates whether the research involves human subjects, animals, or radiation. If the research involves any of these items, the student must also receive approval of the University Compliance Committee prior to proceeding with the project.

## Full-Time Status

Full-time graduate students supported by the Department through a TS, TA, RA or any other source from general funds must register for at least 9 credit hours in the Fall Semester and 9 credit hours in the Spring Semester. This total includes credit hours for seminar, research, or special topics that may not satisfy formal degree requirements but excludes audit hours.

Students receiving financial assistance that fail to maintain full-time status will be liable for tuition costs. Conversely, students that register for more than 9 hours must (unless further tuition support is approved by the Department's Graduate Director) pay tuition costs for those hours in excess of 9, including any audit hours.

First year students that receive financial assistance from the Department must register for at least three (3) courses fall semester (excluding seminar, research, special topics, thesis and dissertation hours) of at least three (3) credit hours each. Students that fail to do so risk losing their financial assistance.

## Part-Time Status and Minimum Continuous Enrollment

To maintain part-time status, graduate students must register for at least one (1) graduate credit hour each semester. All students either working on their thesis or dissertation or using University facilities and services must register and maintain either full- or part-time status.

## International Student Status and Visa Requirements

International students must maintain full time status to hold a valid visa in accord with federal regulations. Such students must register for a minimum of nine (9) semester credit hours until they complete their degree coursework requirements. However, upon completion of required coursework, a student may register for one (1) credit hour after filing with the Office of International Student and Scholar Services a letter from their

advisor stating that they have done so and are working on research exclusively. Students who fail to provide a letter of documentation risk having their registration denied.

# Practical Training

During the course of their study or at the completion of it, all international students may apply for practical training. Two types of practical training exist: curricular and optional. *Curricular practical training* (CPT) normally occurs before the student has completed all degree requirements. According to the Department of Homeland Security (DHS), curricular practical training must fall in one of the following categories: a required training internship which earns credit (must be formally listed in course catalog), a required training internship which does not earn credit (must be formally listed in course catalog), an elective training internship which earns credit (must be formally listed in course catalog), or a recognized cooperative education experience which is elective or required and is sanctioned by the University (classroom study must be integrated with a structured and supervised offcampus work experience).

*Optional practical training* (OPT) may be either *pre-completion* or *post-completion*. Precompletion OPT is available for students during a regularly scheduled vacation period, the summer term. The authorized pre-completion OPT time may not exceed that available during a single vacation period; students may participate in pre-completion OPT for more than one vacation period but only one is authorized at a time. Post-completion OPT is available for students who have maintained F-1 status and completed all graduation requirements (time begins at completion of requirements, not at graduation). Postcompletion OPT is typically granted for 12 months, and students who have completed degrees in Science, Technology, Engineering, or Math (STEM) fields may qualify for an additional 24 month extension of their OPT.

To apply for OPT, a student must log into the iRocket portal (oisss.utoledo.edu) and provide the below documents to the Office of International Student and Scholar Services:

- Form I-765
- Form G-1145
- Two recent passport size color photos (taken at appointment)
- \$410.00 personal check or money order payable to: Department of Homeland Security
- Copy of passport
- Copy of Visa
- I-20
- I-94 (https://i94.cbp.dhs.gov/I94)
- Letter of Certification from the Graduate Studies Director

After the designated school official recommends practical training authorization on Forms I-538 and I-20, all required documents are sent to the appropriate INS office for processing. The approval process requires from four to six weeks to complete.

Requests for post-completion OPT must be made at the Office of International Services no sooner than ninety (90) days before nor sixty (60) day after the completion of degree requirements. Requests for pre-completion OPT must be made no sooner than one hundred twenty (120) days prior to the training start date.

# Excessive Credit Hours

The Ohio Board of Regents denies state subsidy for graduate students who have earned more than 172 graduate credit hours. Students who have earned more than 172 graduate credit hours at the University of Toledo are not eligible for financial aid from general funds. Financial aid may also be denied to students whose earned graduate credits exceed those required for their degrees (30 credit hours for M.S. students and 90 credit hours for Ph.D. students).

### Course Registration

You are responsible for:

- registering early to ensure your required courses are available
- attending all courses for which you have registered
- arranging payment plans
- dropping or withdrawing in a timely way to avoid being billed for classes you do not intend to take

#### How Do I Register?

#### Online Registration:

Students may register for classes using any PC with internet access by accessing the myUT portal. To login to the myUT portal, users enter their UTAD username and password. The myUT portal allows students to register for classes and print a bill or class schedule. You can access the myUT portal at: myut.utoledo.edu.

Students can also search for classes through the myUT portal. Students that want to register for a special topics course that is not included in the schedule of classes will need to complete the Course Request Form and obtain their instructor's signature. Students will also need to fill out the Course Request Form, with instructor's signature to register for thesis/dissertation research hours. If online registration is still open, students can see Chanda for a permit to register for the course online.

#### Adding a Course

A student may add a course or register late within the first five calendar days of a new semester, excluding summer (which is prorated), without permission from the instructor as along as a seat is available. Students wishing to add a course between the 6th and 15th calendar days (inclusive) of a new term may do so with the instructor's permission as well as the Dean or designee from the student's College Office. This request can be made via the Course Request and Seminar Request Form.

After the 15th day, students wishing to add a course may petition to do so with the form. This will require signatures from the instructor of the course, the Dean or designee from the student's College Office, as well as approval from the appropriate Provost.

#### Late Registration Fee

A late registration fee is assessed for initial registrations on or after the first day of the semester as follows:

- The first through third day of the term \$50
- The fourth through fifteenth day of the term \$100
- The sixteenth day through the last day of the term \$200
- After the last day of the term \$500

#### Dropping/Withdrawing from a Course

Students who decide not to attend or stop attending any or all classes for which they have registered must drop or withdrawal from the course(s). Drops and withdrawals can be processed online through the myUT portal (provided there are no holds), and can also be processed at Rocket Solution Central (RSC) located in Rocket Hall, Room 1200. Failure to drop or withdraw from a course for which a student has stopped attending may result in a grade of "F". Specific drop and withdrawal dates for a term are listed on the University's academic calendar. Instructor's signatures are not required for dropping or withdrawing from a course.

In the event that a student becomes critically ill or injured during the course of the semester, the student should contact the Student Medical Center for information on the Medical Drop/Withdrawal process.

**WARNING:** Withdrawing from a course(s) will result in a grade of "W", which will appear on your official transcripts; a grade of "W" does not affect the grade point average. Once a withdrawal is processed, it cannot be rescinded. Based on the date of withdrawal, fees may or may not be adjusted. Since withdrawn courses reduce your enrolled hours, withdrawing from courses may have an adverse effect on financial aid benefits, scholarships, loan deferments, athletic eligibility, health insurance, veterans' benefits, degree requirements, or other areas. If you are uncertain what effect withdrawing from the course(s) would have, it is recommended that you contact Chanda for guidance.

#### **Grade Changes**

IN or PR to a letter grade: After work is completed, the instructor will complete a change of grade form and forward it to the Office of the Registrar.

All letter grade to letter grade changes must be forwarded to the college office for final approval. They are then submitted to the Office of the Registrar.

#### **Tips To Remember Before You Register**

- You can register through the myUT portal at myut.utoledo.edu or in person at Rocket Solution Central located in Rocket Hall.
- Make sure you memorize your Rocket ID #

- Make sure you have obtained signatures if required (professor's signatures are required after the online add date and if a course is closed). You will need to fill out the Course Request Form, which are available online and in Chanda Raine's office (NI 3050).
- Be aware of PAYMENT DUE Dates!
- Remember your password or write it down in a safe, secure place.
- "R" in the day column of the course schedule represents Thursday.
- Shaded course times specify evening or Saturday classes.
- Make sure your schedule does not overlap anywhere when planning it. (Ex: two classes at the same time)
- Know where your classes have been scheduled (which building, day, and time).
- Plan enough time between classes to get from one building to another, as well as time for lunch, studying, etc.

### Student ID

All new students may obtain a Student ID card after they register and pay their fees. To obtain a card go to Campus Community Support Services Office, Room 1610 at Rocket Hall. To get a card you will need a valid picture ID (driver's license, passport, etc.). The ID is valid only for the semester in which they register. The IDs of continuing students are validated electronically (whenever the card is read the student number on the card is compared to the list of valid student numbers) for the semester in which they register and do not require any action by the student.

# <u>TOP</u>

## **Master's Degree Program**

### Requirements

Students may select one of two Master's of Science in Chemical Engineering (M.S.Ch.E.) degree programs: thesis or non-thesis. A Professional Science Master's track in Green Chemistry and Engineering also is offered.

The thesis option requires completion of 30 hours of course credit, successful defense of a thesis and typically takes two years to complete. Minimum requirements are:

- Twelve (12) hours in four (4) core chemical engineering courses: CHEE 6500 Advanced Chemical Reaction Engineering CHEE 6510 Advanced Chemical Engineering Thermodynamics CHEE 6550 Transport Phenomena I CHEE 6560 Transport Phenomena II
- The Graduate Launch (GNEN 5000) seminar course (0 credit hours)
- Nine (9) hours of graduate course work
- Continuous registration for and attendance of the Graduate Seminar for full time students
- Nine (9) hours of thesis work completed to the satisfaction of the thesis committee and successful oral defense of the thesis before the committee in a public forum.

The non-thesis Master of Science options are: coursework and project. For the coursework option, students are required to complete 30 credit hours of approved graduate study including:

- Twelve (12) hours in four (4) core chemical engineering courses (see thesis option requirements for specific classes)
- Eighteen (18) hours of graduate coursework.

For the project option, students are required to complete 30 credit hours of approved graduate study, including six hours of a Master's of Science project as specified. Students are required to submit a written project report to the department after approval by the chemical engineering faculty project supervisor. Specific requirements are:

- Twelve (12) hours in four (4) core chemical engineering courses (see thesis option requirements for specific classes)
- Twelve (12) hours of graduate coursework
- Six (6) hours of Chemical Engineering Project CHEE 6920 completed to the satisfaction of the faculty project supervisor
- Continuous registration and attendance for the Graduate Seminar for full-time students.

Only credit hours obtained with a letter grade of "C" or higher, or an "S" grade for the limited number of classes offered on a satisfactory or unsatisfactory basis, will fulfill degree requirements. Students must maintain a grade point average (GPA) of 3.0 or above. Additionally, the graduate course work must satisfy the following restrictions:

- No more than three (6) hours of independent study, special problems, Graduate Seminar (CHEE 5930) or special topics
- No more than seven (7) hours in dual level courses; courses with a minority enrollment of selected undergraduates are not restricted
- All courses must be taken at the 5000 level or higher in the College of Engineering, the College of Pharmacy and Pharmaceutical Sciences, the College of Medicine and Life Sciences, or the College of Natural Sciences and Mathematics.

Students should carefully select their courses to enhance their educational background and complement their research activities.

All students must register for one hour of Seminars in Chemical Engineering, CHEE 5930, each semester during the academic year. This course is graded on a satisfactory, unsatisfactory basis. To receive a grade of "S," students must attend all seminars or provide a written explanation for their absence.

#### The Professional Science Masters in Green Chemistry & Engineering

The Professional Science Masters in Green Chemistry & Engineering option requires completion of 30 hours of coursework, 6 hours of industrial internship, and typically takes one year to complete. Minimum requirements are:

- CHEM 6200 Green Chemistry (3)
- CHEM 6210 Environmental Chemistry (3)
- CHEE 6010, Green Engineering Principles for Chemical Processes (3)

- CHEE 6110, Green Engineering Applications in Chemical Industries (3)
- BUAD 6600, Supply Chain Management (3)
- EFSB 6690, Technology Commercialization OR EFSB 6590 New Venture Creation (3)
- Twelve (12) hours of elective graduate course work

Students possessing a Bachelor's degree in Chemical Engineering are required to take three additional hours of elective graduate course work in lieu of CHEE 6010.

The elective graduate course work may come from traditional areas of chemistry and chemical engineering at the 6000 level. Up to four hours of 6000 level course work in a related discipline (e.g., environmental sciences or physics) and up to two hours of independent research project (CHEE 6980) may be applied to the elective graduate course work requirement subject to the approval of the PSM program director. Research seminar (CHEE 5930) cannot be applied towards the elective graduate course work.

Six (6) hours of Graduate Industrial Internship (CHEE 6970) also are required. The Graduate Industrial Internship must be completed at an industry, governmental organization, or non-governmental organization in an area relevant to green chemistry and engineering. The PSM program director will assist in identifying Internship opportunities and must approve all placements. Students who are working or have worked part or full-time in a relevant job may request Internship credit for this work experience. The Director will evaluate all such requests and give credit if appropriate.

### Master's Thesis

To obtain credit for their thesis work, students must prepare, submit, and defend a Master's thesis to the satisfaction of their Thesis Committee.

### Thesis Committee

In consultation with the student's advisor, the Graduate Director will appoint a thesis committee. The thesis committee will consist of at least three (3) individuals. The committee must include the advisor and at least two (2) full-time members of the Chemical Engineering Department (one of which may be the advisor).

The chair of the thesis committee must be a full-time faculty member of the College of Engineering holding full membership on the graduate faculty. Usually, the chair is the student's advisor but if the advisor does not meet the chair requirements another individual may serve as chair. Changes in the committee chair or membership must be approved by the Graduate Director.

The primary responsibility of the thesis committee is to ensure the thesis research is of sufficiently high quality to warrant the award of a Master's degree. The committee formally enforces quality standards by either passing or failing a student in the final thesis defense. The committee also provides general counseling to the student.

### Thesis Proposal

The student must prepare a thesis proposal immediately after formation of their thesis committee. Committee members must approve of the proposal and indicate their approval

by signing the Notice of Thesis form. The student must submit this form along with the Assurances of Compliance with Applicable Federal and State Regulations Governing Research form to the Graduate School before engaging in any research activities.

# Thesis Defense

Students must submit a written summary of their research activities to committee members in the form of a thesis. The thesis serves to document research findings and provide an archival source for future researchers to consult. The Graduate School provides guidelines for thesis preparation.

The advisor must approve a final draft of thesis before distribution to committee members. Upon advisor approval, the student may submit the draft to committee members for their evaluation.

After committee members have sufficient time to review the draft, the student may schedule a time for the thesis defense. Students should give committee members at least one week for the review process. All committee members must be present for the defense.

The defense is open to all interested parties and scheduled in a public place. Generally, the student will summarize the thesis work in a 30-minute oral presentation to open the defense. Then, the thesis committee and other defense attendees may ask questions regarding the thesis work.

After the questioning period, all attendees, except for the thesis committee, leave the defense room. The committee then discusses the merit of the thesis and decides by majority vote whether the defense was successful or not. If the defense is not successful, the thesis committee, in consultation with the Graduate Director, will determine what corrective actions are necessary. If the defense is successful, the committee may still require the student to make changes in the thesis and approve of the changes made.

### Time Limit

Students must complete all requirements for the M.S.Ch.E. degree within the six years that immediately precede the date the degree is awarded. If such a requirement poses undue hardship, students may petition the Graduate School in writing to extend the time period.

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# **Doctoral Degree Program**

The doctoral degree requires a total of 90 credit hours split equally between coursework and dissertation research. However, to be formally admitted to candidacy for the degree, doctoral students must first pass the preliminary and qualifying examinations. After admission to candidacy, the completion of 45 credit hours of coursework and 45 credit hours of dissertation research, doctoral candidates must prepare a written dissertation documenting their research efforts. Final approval for graduation is contingent upon a successful oral defense of the dissertation before the dissertation committee in a public forum. All coursework and dissertation research must be completed within a seven-year period.

# Requirements

Minimum requirements for the Doctor of Philosophy (Ph.D.) in Engineering Science are:

- Twelve (12) hours in four (4) core chemical engineering courses: CHEE 8500 Advanced Chemical Reaction Engineering CHEE 8510 Advanced Chemical Engineering Thermodynamics CHEE 8550 Transport Phenomena I CHEE 8560 Transport Phenomena II
- The Graduate Launch (GNEN 5000) seminar course (0 credit hours)
- Thirty-three (33) hours of graduate course work
- Continuous registration for the Graduate Seminar
- Passage of the Preliminary Exam
- Passage of the Qualifying Exam
- Forty-five (45) hours of dissertation research completed to the satisfaction of the dissertation committee
- Having at least one first-author peer-reviewed research article or book chapter submitted by the Dissertation Defense date (review papers may not be used to satisfy this requirement)\*

\* This requirement may (at the discretion of the advisor) be waived if Ph.D. thesis research publication must be delayed to protect intellectual property.

for a total of 90 credit hours. Only credit hours obtained with obtained with a letter grade of "C" or higher, or an "S" grade for the limited number of classes offered on a satisfactory or unsatisfactory basis, will fulfill degree requirements.

For students admitted with a Bachelor's degree, the graduate course work must satisfy the following restrictions:

- No more than fifteen (30) hours of independent study, special problems, Graduate Seminar (CHEE 5930) or special topics
- No more than eleven (11) hours in 5000 level courses
- All courses must be taken at the 5000 level or higher in the College of Engineering, the College of Pharmacy, the College of Medicine and Life Sciences, or the Biology, Chemistry, Mathematics, Environmental Sciences, and Physics Departments of the College of Natural Sciences and Mathematics.

The faculty may award students admitted with a Master's in Chemical Engineering up to 30 hours of credit. This may include credit for core classes if the faculty deem classes taken as a Master's student are comparable to the core classes. The student must satisfy all other requirements as listed above. Additional course work must satisfy the following restrictions:

- No more than fifteen (15) hours of independent study, special problems, Graduate Seminar (CHEE 5930) or special topics
- No more than four (4) hours in 5000 level courses

 All courses must be taken at the 5000 level or higher in the College of Engineering, the College of Pharmacy, or the Biology, Chemistry, Mathematics, Environmental Sciences, and Physics Departments of the College of Natural Sciences and Mathematics

Students should carefully select their courses to enhance their educational background and complement their research activities.

All students must register for one hour of Seminars in Chemical Engineering, CHEE 5930, each semester during the academic year. This course is graded on a satisfactory, unsatisfactory basis. To receive a grade of "S," students must attend all seminars or provide a written explanation for their absence.

### Initial Admission

Students are initially admitted to the Doctoral program on a provisional basis. They may begin work toward their degree but are not considered formal candidates for the Doctor of Philosophy. Students must pass the preliminary exam and the qualifying exam prior to being formally accepted as a candidate.

### Preliminary Exam

The purpose of the preliminary exam is to evaluate whether a student possesses the background necessary to complete doctoral degree requirements. The exam consists of an oral exam, given at the end of the first year for all new doctoral students.

The exam will require the students to formulate and defend a research plan, wherein they will: (1) propose a study (on a topic selected by the advisor) that can result in a peer-reviewed journal publication; (2) submit a 6 - 10 page double-spaced proposal; and (3) deliver a 15 - 20 minute presentation followed by questions. To pass this exam, the candidate must demonstrate the ability to plan a study using appropriate research tools, be able to use chemical engineering principles to defend their research proposal, and exhibit effective written and oral communication skills.

Students either pass or fail the exam. The faculty as a whole will evaluate the results and will consider input from the student's advisor, TA assignment supervisors and classroom instructors to determine the final grade. Students who fail the exam may petition the Department to consider offering a retake of the exam. If permission is not granted, then the exam failure will be final.

Students that enter with a B.S. and ultimately fail the exam are required to complete a Master's degree or leave the program. Students that enter with a M.S. are required to leave the program or pursue another M.S. degree.

### Dissertation Committee

In consultation with the student's advisor, the Graduate Director will appoint a dissertation committee upon passage of the preliminary exam. The dissertation committee will consist of at least five (5) individuals. The committee must include the advisor, at least two (2)

full-time members of the Chemical Engineering Department (one of which may be the advisor) and at least one representative from outside the Department.

The chair of the dissertation committee must be a full-time faculty member of the College of Engineering holding full membership on the graduate faculty. Usually, the chair is the student's advisor but if the advisor does not meet the requirements of the chair another individual may serve as chair. Changes in the committee chair or membership must be approved by the Graduate Director.

The primary responsibility of the dissertation committee is to ensure the dissertation research is of sufficiently high quality to warrant the award of a Doctoral degree. The committee formally enforces quality standards by either passing or failing a student in the qualifying exam and final dissertation defense. The committee also provides general counseling to the student.

### Doctoral Program Proposal

Immediately after formation of the dissertation committee, a student must submit the Doctoral Program Proposal form, that has been approved by the committee, to the Graduate School. This proposal lists all courses and other requirements of the student's planned doctoral program, excluding the dissertation.

# Qualifying (Proposal Defense) Exam

The qualifying exam consists of an oral defense of the proposed doctoral research project. The student must submit a written proposal to their dissertation committee at least two weeks prior to the proposed exam date. The proposal should contain the following sections:

- Project Summary
- Research Objectives
- Research Significance
- Literature Review
- Research Plan
- Project Timeline
- Bibliography

The entire proposal should be prepared using a 12-point font and one-inch margins around the page. The project summary should be double-spaced and extend not more than one page. Sections 2 – 5 should also be double-spaced and not exceed 40 pages in length.

There are no restrictions on the student concerning preparation of the proposal. Students may consult with both faculty and other students, if agreeable.

The oral defense consists of a brief presentation of the proposal, typically 30 - 45 minutes, followed by a question and answer session. During the exam, the committee will assess the appropriateness of the proposed project for a doctoral dissertation and the student's ability to successfully complete it; passage indicates that the committee believes the project is suitable and the student can complete it.

If a student fails the exam, they may petition the Department to retake the exam the following term. However, a second chance at passing the exam is not guaranteed.

### Dissertation Defense

After completing all other degree requirements and preparing a final draft of the dissertation, the student may schedule a final defense date with the dissertation committee. The Graduate School provides guidelines for dissertation preparation.

The defense is open to all faculty members of the University. Consequently, the student must submit the defense date to the Graduate School two weeks in advance to permit University-wide notification. At the same time, each committee member should receive a copy of the dissertation draft.

The defense consists of a short oral presentation, 30 – 45 minutes in length, followed by a question and answer session. During the defense, the committee will evaluate if the student has satisfactorily completed the proposed dissertation research and possesses a Doctoral level understanding of general Chemical Engineering and the particular research area.

If more than one member of the Advisory Committee votes against accepting the dissertation, the student fails the defense. The student may revise the thesis to address the concerns of the committee and request reconsideration. If the committee still fails the student, the student may petition the Graduate Committee of the College of Engineering to review the Advisory Committee decision.

After passing the defense, the student may file for graduation. Students must present the dissertation to the Dean of the Graduate School at least one month prior to the commencement at which they receive their degree. When planning for graduation, students are strongly encouraged to allow time for dissertation revision since passage of the final defense inevitably requires some revision.

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# **Graduation Requirements, Participation in Commencement Exercises and Awarding of Diplomas**

To receive their final degree, a student must have:

- satisfied minimum degree requirements as outlined here
- submitted a Notice of Thesis, if required for degree
- resolved all outstanding fees and fines
- contacted Computer Services to arrange disposition of your computer files and accounts
- transferred ownership of all chemicals to another student or your advisor
- returned all keys to the Key Control Office in the Physical Plant and Security Building
- completed Application for Graduation form (see below)

- regular admission status
- official transcripts on file
- registration for a minimum of one graduate credit
- approved Plan of Study on file with all courses appearing on transcript
- completed Graduate Research Advisor (GRAD) Committee Approval and Assurances form on file, if dissertation, thesis or project is required for degree
- completed Application for Candidacy on file (doctoral students only)
- written proof of passing Comprehensive and/or Foreign Language Exams, if required for degree
- approval of dissertation, thesis or project by committee meeting university guidelines, if required for degree
- submitted three copies of thesis or project (one copy if submitted electronically to OhioLINK) by last day of classes for the semester, if required for degree
- submitted two permanently bound copies of the either the Master's thesis or Doctoral dissertation to the Chemical Engineering Department: one copy for the advisor and Department
- submitted Intellectual Protection and Patent Sign-Off form
- submitted ProQuest UMI Publishing Agreement (doctoral students only)
- submitted Survey of Earned Doctorates (doctoral students only)
- removed all "PR" and "I" grades from transcript (all grades posted)
- attained cumulative GPA of 3.0 or above
- paid outstanding fines and fees

For complete information, please visit the College of Graduate Studies website, <u>www.utoledo.edu/graduate</u>, and follow the Current Graduate Students link.

Students must file an Application for Graduation form with the Graduate School. The filing deadline is the 4th week of the semester in which the student wishes to graduate. The form may be obtained either in the College of Graduate Studies office or on the College of Graduate Studies website. If the student does not graduate, the student must resubmit the Application for Graduation.

The University conducts graduation and commencement ceremonies in December after the Fall Semester and in May after the Spring Semester. Those students anticipating an August graduation have the option of participating in the May commencement ceremony. Students planning to graduate in August should check with Student Records regarding their commencement options and deadlines for filing their Application for Graduation. Please note that attendance at the ceremony does not mean that you have graduated; award of the degree is contingent on completion of all degree requirements.

Candidates must wear appropriate academic dress at commencement exercises. Arrangements for academic dress must be made with the Bookstore well in advance of commencement. Information regarding rings and announcements is also available from the Bookstore.

Degrees are posted on a student's transcript within two (2) weeks after the commencement exercises, provided all requirements are met by the appropriate deadline and the Graduate School has academically cleared the student. The University will mail diplomas and diploma cases to students who do not attend commencement ceremonies using the home address given on the Application for Graduation. If you wish your diploma mailed to another address please contact the Graduation Processing Department.

If a student's records have been coded as "No Release" for directory information, the student's name will not be published in any area newspapers for graduation. If a student wishes to verify or change their directory release information, they must contact Graduation Processing in Student Records at (419) 530-4829 no later than one month before graduation. Printing in area newspapers cannot be guaranteed after that date.

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### **Miscellaneous Items**

#### Grade Point Average Calculation

All grade point averages used in this handbook use the same 12-point grading system as the University of Toledo. The following table lists all of the grades included in the GPA calculation the point value assigned to them.

Grade	Point Value	Grade	Point Value
А	4	С	2
A-	3.67	C-	1.67
B+	3.33	D+	1.33
В	3	D	1
B-	2.67	D-	0.67
C+	2.33	F	0

The formula used to calculate GPA is: GPA = credit hour points/credit hours. Credit hour points are given by the sum of [(course credit hours)(value of letter grade received)] while credit hours are given by the sum of [course credit hours]; the sum extends over all courses taken by the student. Although graduate courses completed with a letter grade lower than a "C" do not satisfy academic requirements, the GPA calculation includes those courses.

A student may receive one of a number of other grades in addition to those in the table above. Of these special grades, students are must likely to encounter one of the following:

- Students may receive a "PR" grade for Master's thesis or Doctoral dissertation hours or other projects at the graduate level. The "PR" grade indicates work in progress and such courses are not included in the GPA calculation.
- Some graduate courses are offered on a Satisfactory, "S," or Unsatisfactory, "U," basis. Courses completed with a grade of "S" may be used to fulfill degree requirements but are not included in GPA calculations. Courses completed with a grade of "U" may not be used to fulfill degree requirements and are treated like courses with a grade of "F" in GPA calculations.

• Students may receive an "I" for classes in which they do not fulfill all class requirements. The GPA calculation includes all "I" grades with a point value of 0.

See your advisor for further clarification of grading and GPA calculation issues.

## Grievance Procedures

There are two types of grievances: academic and employment grievances. Academic grievances arise from disagreements over grading practices or grade assignment while employment grievances arise from disagreements over the work environment or workload.

Students should address academic grievances initially to the instructor in charge of the course in which the grievance is lodged. Students should address employment grievances to their research advisor or immediate supervisor. In both cases, the student and faculty member should discuss the problem and attempt to resolve it.

If the student and faculty member cannot resolve the problem, the student should direct the grievance to the Department Chair. If the Department Chair cannot resolve the grievance, the problem is referred to the College Dean. Finally, if the College Dean cannot resolve the grievance, students may seek the recommendation of the Academic Standing Committee of the Graduate Council for academic grievances or seek a resolution of employment grievances from the Graduate School.

### Keys

Graduate students may obtain keys only to laboratories in which they work or designated common areas for graduate students, such as the graduate student office in North Engineering. All key requests must come from the student's advisor. The Department Secretary processes the paperwork and informs the student when the keys are ready. Students may pick them up at Building Services in the Physical Plant and Security Building.

If a student leaves the University without returning their keys, the Department is charged \$25 for each key not returned. To cover this potential cost, we will collect a \$25 security deposit from each student for each key they receive. This money will be held by the Department until the student returns their keys at which the deposit will be refunded.

### Mail

Mail sent to graduate students should be addressed to the Chemical Engineering Department (MS 305), University of Toledo, Toledo, OH 43606-3390 USA. The Department Secretary distributes incoming mail daily to student mailboxes located in NI 3050. Students should check their mailboxes at least once a day.

Mail that a student sends as part of their professional activities (for example, requesting reprints of papers or submittal of an abstract to present a conference paper) does not require postage but must be mailed using either a Chemical Engineering Department envelope or mailing label. Students should not mail personal correspondence or bills using Department envelopes or labels. However, students may leave personal mail with appropriate postage in the mailroom in the bin labeled "Outgoing Mail."

To send mail to individuals in the College or University, use inter-office mailers or write the destination clearly on another envelope. Place the mail in the bin labeled "College Mail" or "University Mail" depending on its destination.

# Photocopier and Fax Usage

The fax machine (phone number: (419) 530-8086) and photocopier are located in NI 3065 and 3048, respectively. The Department Secretary oversees the usage and repair of both.

Students may use either machine as part of their professional activities. For example, a student may use the photocopier to photocopy journal articles that are relevant to a student's research or the fax machine to submit an abstract for a presentation at a professional meeting. All other usage is prohibited.

To use the fax machine, the student should place all fax items in the Department Secretary's in-box with: a written request to fax the material, the name and fax number of the person receiving the fax, and the professional need for the fax. The secretary will fax the material and return it to the student's mailbox.

Students may use the photocopier at any time during office hours, 8-5 Monday through Friday. However, students may have their work interrupted if the photocopier is urgently needed by the staff or faculty.

If the student encounters any difficulties with photocopier, the student should report the problem to the Department Secretary either verbally or through a written note. Do not leave the machine without paper, with jammed paper, or flashing any other error message without notifying the secretary.

## Purchasing

All purchases require advisor approval. Additionally, the advisor must specify the source of funds for the purchase. Purchased items are normally delivered to the Department Office unless size, weight or other shipment conditions require special delivery. The Secretary will inform the student by mail of delivery to the Office and students can pick up items there.

## Parking

Graduate students are eligible for the same parking privileges as faculty and staff and receive a reduced rate on the parking permit. The cost of a parking permit is currently \$125 per semester. Students may purchase parking permits online.

## Safety

Most students will work with chemicals in the laboratory to partially fulfill their degree requirements. The Chemical Engineering Department wants all students to work *safely* and thereby avoid personal injury or property damage.

To achieve this goal, we require that students adhere to safety guidelines. All students must participate annually in university safety training.