# Davidson School of Chemical Engineering COLLEGE OF ENGINEERING

# Davidson School of Chemical Engineering Undergraduate Program Guide 2018-19

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# **Welcome to Chemical Engineering!**

The purpose of this guide is to aid the undergraduate student in following registration procedures and completing the requirements for the baccalaureate degree in Chemical Engineering. This publication does not supersede any statements made by the Purdue University Course Catalog, faculty documents, Office of the Dean of Engineering, or Office of the Registrar.

Your academic advisor will assist you as much as possible with registration and fulfillment of the graduation requirements for the BSChE degree. However the final responsibility for completing the graduation requirements rests with the individual student. This guide and the Schedule of Classes published each semester should provide adequate information to the student for routine registration. In addition to the Plan of Study guides that are included in this booklet, the University Regulations Reference Book may be useful for finding information regarding the academic calendar, transfer of credits, scholastic standing, changing a grade, etc.

# The Purdue Chemical Engineer

Chemical Engineers take chemistry and math into the world around us. They are creative problem solvers who apply scientific knowledge and technical expertise to meet a worldwide demand for useful materials at a reasonable cost and in the safest manner possible. Chemical Engineers are involved in creating new medicines, new materials, and new processes that improve the quality of life across the globe, protect the environment, and conserve our natural resources. They work in research, design, development, production, technical sales, and management. Some are consultants, computer system designers, doctors, or lawyers focusing on patent or environmental law. Chemical Engineers are responsible for the basic necessities in life that many of us take for granted. Because of the Chemical Engineer's unique background, Chemical Engineering is one of the broadest fields in the science-technical area. A background in chemical engineering offers a wide variety of career options.

The Purdue Chemical Engineering Curriculum builds on the basic sciences and other branches of engineering. Elective programs developed by the student with his or her advisor can create options in such areas as applied chemistry, biochemical engineering, biomedical engineering, chemical reaction engineering, chemical processing, energy and natural resources processing, environmental engineering, food processing, geoscience, materials science, nuclear engineering, pharmaceutical engineering, pre-law, pre-medicine, process control, production and sales, and systems engineering.

# **Chemical Engineering Undergrad Office**

# FRNY G041 Monday – Friday 8:00am – 12:00pm and 1:00pm – 5:00pm (765) 494-5650



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# **The Undergraduate Office**

This office staff is dedicated to working with our undergraduate population. The staff, and the population they collaborate with specifically, are:

- Karissa Raderstorf, Associate Director of Undergraduate Programs;
  - o Advisor for transition to School of Chemical Engineering via CODO or T2M process
- Caryn Morgan, Senior Academic Advisor; liaison for study abroad coursework into ChE
- Allen R. Reigel, Senior Academic Advisor; Co-Op Program students
- Sandy Hendryx, Undergraduate Office Secretary and Secretary for Co-Op Program
- Dr. Gabriela Nagy, Director of Industrial Education, Office: FRNY G051
  - o Oversees Davidson School of Chemical Engineering Co-Op Program and Seminar courses

The office has an open door policy and students are welcome to stop in (during designated dates), send email, or schedule an appointment to meet their assigned Academic Advisor using the following guidelines:

- **DROP-IN:** The <u>first two weeks</u> of a semester the office operates on a "stop by" option, to assist students with course modification, formwork, or other requests concerning the current in-session term.
  - o Please understand the Advisors job duties involve fulfilling other responsibilities, so they may be unavailable at the time of coming in, but Sandy can suggest a time to return.
- **APPOINTMENT:** During the semester, students should schedule an appointment, with their assigned Advisor, to ensure time to discuss registration and academic or other issues. Students should, and have access to, scheduling appointment via **Boiler Connect** (link also in myPurdue account).
  - During "registration season", appointments are 15-minutes and for registration only. If there are other matters to discuss, please set an appointment outside of time frame outlined in "Registration" section.
- **E-MAIL:** *Registration and extensive inquiries require an appointment*, but Advisors will address general questions through e-mail, but due to volume it must be concise and only requires a short response.
  - o Registration by e-mail is acceptable for those students off-campus on Co-Op, internship or study abroad experience only...all other students must do so through appointment.

# **Academic Advising**

For undergraduate students in the Davidson School of Chemical Engineering, Academic Advisors, to which students are assigned, work with students regarding academic concerns, issues, processes and policies. The Academic Advisor is the student's front-line and most utilized resource throughout their education for reasons such as:

- Questions about the degree program, minors, concentrations, plans of study, etc.
- Questions about courses from Study Abroad applying toward degree
- Personal issues interfering with academic performance
- Academic Probation/deficiency issues poor performance in Chemical Engineering coursework
- Registration
- Questions about other resources on campus

#### Purdue University's Advising web site states:

"The mission of undergraduate advising at Purdue University is to partner with students, faculty, staff, departments, and administration to empower students to develop and implement an individualized plan for academic success, and personal and career development, while integrating learning and enrichment within the University and community, as well as assisting students in understanding the nature, purpose, and value of higher education."

#### In that capacity, students in the Davidson School of Chemical Engineering can expect their advisor to:

- Explain college and major requirements
- Discuss student's academic performance
- Assist with major exploration and interpreting degree requirements
- Empower student's to advocate for themselves
- Support personal concerns and academic issues
- Provide a safe, inclusive environment
- Provide detailed knowledge and guidance about the standards and program(s) they advise
- Help guide through plan of study and give advice about course requirements
- Inform of required prerequisites for subsequent courses in their program
- Assist with long- and short-term goal setting
- Talk about personal and academic strengths, interests, and abilities
- Establish a positive working relationship to provide a welcoming atmosphere at Purdue
- Teach how to analyze information and make well-informed choices throughout academic career
- Educate on various policies and procedures necessary to navigate the University
- Inform students of their responsibilities in the advising process
- Refer to additional campus resources or services as needed

#### Students are expected to fulfill the following responsibilities in the advising process:

- Know your Academic Advisor (name, office location, and email address)
- Communicate interests in research, study abroad, and/or experiential learning to plan in a timely manner
- Check <u>@purdue.edu</u> email account daily
- Be open to exploring new challenging opportunities
- Develop realistic short- and long-term educational and career goals
- Become familiar with the variety of campus resources and services
- Notify your advisor of any academic difficulties or changes in program or career interests
- Meet with Academic Advisor minimally once a semester (required for registration PIN), and be:
  - o Prepared with course ideas by researching offerings for registration on the Form 23
  - o Prepared with questions regarding academics, policies, plans of study
- Review degree requirements and monitor academic progress in myPurduePlan consistently
- Be informed of Purdue and Davidson School of Chemical Engineering academic policies and procedures
- Be proactive in your education; seek help at the first sign of concern!
- Accept there may be struggles in some classes; this is to be expected. Work hard and remember to communicate with your advisor!

## Registration

Students are required to meet with their Academic Advisor, <u>by appointment</u>, unless off-campus due to Co-Op, internship, or study abroad experience, to discuss courses for the subsequent semester. Purdue has required advising, restricting students from accessing their registration system, until having met their Advisor, to audit course selections, and then receive the random 6-digit PIN to access the system. Find more about <u>registration</u> <u>information with FAQs</u>, "how to", time tickers, add/drop classes, etc.

Registration take place three times per year for subsequent terms and the Undergraduate Office will communicate (email) prior to addressing the office processes and another pertinent information:

- 1. Registration for fall semesters usually begin mid-March
- 2. Registration for spring semesters usually begin mid-October
- 3. Registration for summer sessions usually begin late-January

#### NOTE:

- Student must have filled out a Form 23A with course ideas; this is required for appointment.
- **Preparation is expected!** Purdue disclaimer; "the student is ultimately responsible for knowing and completing all degree requirements". The Advisor's role is to <u>assist</u> with policies and degree progress.
- Register during assigned time ticket as classes tend to fill quickly!

# **BSChE Requirement Descriptions (130.0-cr)**

# **Required Core (41.0-credits)**

The degree core is comprised of all requirements within **Chemical Engineering major** coursework and **Chemical Departmental Requirements**. The outline of course requirements may be found on the official **University Catalog**. Listed are foundation outcome sub-group cores:

Chemical Engineering Major Core (43.0-credits for those admitted Fall 2019 or after)
Required Chemical Engineering course sequence found on the official University Catalog.

# Other Departmental Course Requirements (89.0-credits/87.0)

To further increase the breadth of knowledge, students are required to complete coursework in various categories and elective credit hours, selecting courses from of an approved listing, for these subject areas. Many of the rules associated with these requirements are mandated by **ABET**, Accrediting Board for Engineering and Technology.

It is important to understand the elective courses appearing on all approved lists have been selected by the faculty based on course content without regard to the frequency in which courses are offered. The lists are inclusive of all active courses at Purdue meeting the faculty's standards for a particular elective, however, might not be available for a given semester, so reference the "Look Up Classes" link to determine which courses are offered.

#### 1. First-Year Engineering (31.0-credits)

This coursework is generally completed prior to entrance into the School of Chemical Engineering. If ENGR 13100 is not done, while in ChE, student must complete ENGR 13100 as a prerequisite and prior to enrollment of CHE 20500, the first course of the major core.

#### 2. Biology Selective (3.0-credits)

Students choose one of the listed courses found on the official **University Catalog**.

#### 3. Science Core (14.0-credits)

- Organic Chemistry I, with lab (CHM 26100/2630 **OR** 25500/25501)
- Organic Chemistry II, with lab (CHM 26200/26400 **OR** 25600/25601)
- Electricity & Optics (PHYS 24100 **OR** PHYS 27200)
- Physical Chemistry (CHM 37000)

#### 4. Chemical Engineering Elective (3.0 credits)

To round out the ChE major foundation, by choosing a course option as located on the official **University**Catalog and must come from this list to meet the requirement.

**NOTE:** CHE 49700 and/or 59700 are temporary course numbers assigned to newer content offerings and identified accordingly by different titles in "Look Up Classes".

#### 5. Engineering Electives (6.0-credits)

The approved courses embrace multiple engineering disciplines providing an opportunity to extend understanding in a variety of concepts. A list of eligible courses, as determined by the faculty, may be found on the official **University Catalog** and **must** be selected from the list to meet the requirement.

#### **IMPORTANT NOTICE for Chemical Engineering and Engineering Electives:**

- 6.0-credits total of research may apply toward graduation (CHE 41100, 41200, 49800, 49900)
  - 3.0-credits toward ChE Elective and 3.0-credits toward Engineering Elective
- ABE 5800 or CHE 52500: credit may only be established in one course, not both
- CHE 33000 or MSE 23000: credit may only be established in one, not both

#### 6. Math Selective (6.0- or 7.0-credits)

Students must choose one (1) of three (3) mathematic tracks found on the official <u>University Catalog</u>. The number of credit hours associated with this field is dependent on the math course sequence followed.

#### 7. Technical Elective (3.0-credits)

The course, generally selected from the College of Science, may also be from the ChE Elective and ENGR Elective lists. Eligible courses, as determined by the faculty, may be found on the official **University Catalog** and **must** be selected from the list to meet the requirement.

## **General Education Electives (18.0-credits)**

The requirement consists of coursework from both the University Core (UCC) and Departmental General Education fields. The UCC is a set of learning outcomes required of all Purdue undergraduates ensuring students share similar educational experiences and, in doing so, achieve common foundation goals.

#### **Requirement Fields**

- 3.0-credits must satisfy Humanities (ties in with UCC list)
- 3.0-credits must satisfy Behavioral/Social Science (ties in with UCC list)
- 3.0-credits must satisfy Science, Technology & Society (ties in with UCC list)
- 3.0-credits must satisfy General Education requirement
- 6.0-credits must satisfy General Education Upper Level requirement
  - \* Upper Level is identified as 300-level and above or has a pre-requisite within the same subject

#### **General Education Upper Level**

**Semester 3** 

Students admitted to the Davidson School of Chemical Engineering, on or after Fall 2019, must choose courses from the approved list (Excel format) located on the School web site.

\*\* Courses not selected from the approved list will not apply toward this degree requirement.

# **Suggested Pathway of Chemical Engineering Courses**

The following outlines the critical path for graduation. It is imperative that these courses be taken by the recommended semester in order to graduate in four years. Given the layout of pre-requisites and certain courses only being offered once per year, it is likely if you vary from this path, graduation will require a full extra year.

Semester 5

CHE 20500*	CHE 21100	CHE 30600
MA Selective I	CHE 32000	CHE 37700
	MA Selective II	
Semester 6	Semester 7	Semester 8
CHE 34800	CHE 40000	CHE 43500
CHE 37800	CHE 42000	CHE 45000
	CHE 45600	

Semester 4

<sup>\*</sup> It is strongly recommended to take CHE 20500 in Semester 3 as it is a prerequisite to <u>all</u> CHE courses. These courses are FALL ONLY!

# **Degree Enhancement Opportunities**

# **ChE Research Opportunities**

While research is not required for the degree, but often pursued for elective degree requirements, it is a facet of education bridging theory and the application of knowledge from coursework into simulation, or "real world", aspects while working closely with a faculty mentor. The School of Chemical Engineering provides several avenues for <u>research and innovation</u> which students capitalize and pursue the experience, and to earn credit, while expanding their Chemical Engineering perspective, the application into products and projects, and enhancing writing/reporting and communication skill sets in preparation for careers in what industry expects of our graduates (great resume' builder as well!). These opportunities are also necessary for those students setting sights on continuing education in MS and PhD tracks.

#### **Internal Research**

Many faculty in the School of Chemical Engineering are involved in research to continue learning, discovering and enhancing their contributions to the classroom and labs and potentially in the industry. With these objectives, often faculty provide avenues for students to also contribute to the works while understanding how the academics relates to application and industry. A student will professionally approach a faculty member with a project of interest or relation to study and agree on the involvement of work (hours per week of work, frequency of meeting, and other expectations). A form must be filed through the Undergraduate Office by the Friday of the second week of the semester in which the research is to be done. This will then be registered, through the process dependent of the time of semester, for the credits indicated (based on hours per week), and coded as CHE 41100 which may apply toward the degree in the Chemical Engineering Elective or Engineering Elective or up to 3.0-credits in both areas as CHE 41100 may have a maximum of 6.0-credits apply toward the degree.

#### **External Related ChE Research**

In some situations, Chemical Engineering students secure research opportunities with faculty through other departments around campus. The presented experience can provide exposure of how Chemical Engineering concepts may be engrained in other fields of work, such as pharmaceuticals, foods, health, and other areas. The School of Chemical Engineering, while offering numerous research opportunities, does not discourage students from contributing elsewhere. If a student wishes to earn credit toward their BSChE degree with their external research, to apply as **CHE 41100**, the student and External Faculty, must fill out a supplied form indicating the content of the research and how it integrates Chemical Engineering (engineering concepts specifically). Upon receipt of the application, due Friday of the first week of semester of which research is taking place, the application will be reviewed by the faculty of the Undergraduate Committee for a decision.

## **Minors**

Many departments at Purdue University offer a minor, usually 15.0-18.0-credits, providing an enhanced insight on a subject area to accompany one's degree, but is not as extensive as that of major requirements. There are over 100 minors campus-wide, and, with the completion of all requirements, will be displayed on the transcript. All active minors, and requirements, are located on the official **University Catalog** web site. Please be aware of any additional notations associated with the minor including change of requirements as determined by catalog term.

- Inquiries regarding specifics of a minor should be directed to the offering department
- Student should discuss intent with their Academic Advisor so the minor may be added to academic record
- For most departments, there is no formal application process to add the minor, or enroll courses, with a few exceptions: <u>CS</u> (requires application for admission), ECE, MGMT and ECON (certain courses)
- Final audit for completion of requirements, to approve or deny awarding, done by the offering department

#### **Concentrations**

Students may demonstrate a "focus" by choosing to add one, or more, if time allows, **concentrations**, which are 9.0-credits, and an option for satisfying the Chemical Engineering and/or Engineering Elective requirements vs. random course selections. Upon successful completion, the indicated concentration will show on the transcript.

# **Study Abroad**

For students with who desire to pursue world-wide adventure as part of their education, Purdue's <u>Study Abroad Office</u> is the main resource to begin the process. Studying within other cultures, meeting new people, and seeing new places is an integral part of being a student and having opportunities to these otherwise sometimes rare exposures and experiences. This office is the <u>first place of contact</u> to assist with the preparation of going abroad; they will provide avenues in researching regions/institutions, program lengths offered, courses and application.

When on a study abroad program, the student is accountable to academic policies of the attending institution, as well as those of Purdue University and the School of Chemical Engineering, as if at the West Lafayette campus. Per the School of Chemical Engineering policies regarding study abroad:

- 1. Short Programs (Spring Break, "Maymester", etc. in length)
  - **a.** Credit earned may only be used to fulfill the following BSChE degree requirements:
    - i. Technical Selective, or
    - ii. General Education Elective, or
    - iii. General Education Upper Level
  - **b.** Programs offered through other Schools of Engineering, despite course level, may not be utilized to apply toward the Chemical Engineering Selective **or** Engineering Elective degree requirements.

#### 2. Chemical Engineering Coursework Policies (same as if remaining on West Lafayette campus)

- **a.** Continuation of ChE course sequence, and meeting of prerequisites, remain intact and applicable.
  - Example: Student earned "D+" in CHE 21100, then on the study abroad program the student may only take CHE 21100, if offered, and no other subsequent ChE courses.
- **b.** Coursework may not be enrolled or completed out of sequence and equivalencies must be approved by the School of Chemical Engineering faculty.

Example: If the highest course achieved is CHE 21100, the student may not enroll CHE 37800 without successful completion of CHE 37700 (prerequisite).

# **Honors Programs**

Students who have demonstrated a strong academic ability and wish to conduct research with a faculty advisor an honors approach may provide the academic enhancement and challenge. The research is two semesters in length (Senior fall/spring), or may opt for three semesters depending on project (Junior spring and Senior year). Students must write, submit, and defend a Thesis when pursuing any of these options:

- 1. Chemical Engineering Departmental Honors
- 2. Honors College (effective for students entering Fall 2013 or after)

#### 1. Chemical Engineering Departmental Honors Curriculum

Student may apply after reaching a "contract" with a faculty advisor on research topic and these requirements:

- Cumulative GPA: 3.50 (or higher)
- Must have completed all listed courses with a grade of "B-"or better on the first attempt:

ENGL 10600	MA 26100	CHE 20500	CHE 37700
COM 11400	Math Selective I	CHE 21100	CHE 37800
PHYS 24100	Math Selective II	CHE 34800	

**Note:** Acceptance into the program is possible prior to completion of all courses upon approval of both faculty advisor and Head of Chemical Engineering Honors Program; however, is contingent on earning a grade of "B" or better in the untaken courses.

- Additional Chemical Engineering Requirements in Honors Research
  - **CHE 49800** (Research I)
  - **CHE 49900** (Research II)

• **CHE 54000**: Transport Phenomena

#### 2. Honors College Curriculum (24.0-credits + Thesis)

For new beginning students, the selection process is by invitation only and current students may apply with 3.50 GPA or above and have at least four (4) semesters of study remaining before graduation.

#### > Specific HONR courses (5.0-cr)

- 2.0-cr of HONR 19901 (1.0) & 19902 (1.0)
- 3.0-cr of additional HONR coursework

#### **Elective honors courses (10.0-cr)**

- HONR courses if not applying to specific HONOR course credits
- Honors Contract or courses with honors designation
- Graduate level courses that are not required for your major

#### > CHE Honors courses (9.0-cr)

Students must reach an agreement of research topic with a faculty advisor and complete ChE Honors Program Application prior to enrolling in the following courses:

- **CHE 49800**, Chemical Engineering Honors Research I *and*
- CHE 49900, Chemical Engineering Honors Research II and
- CHE 54000, Transport Phenomena

#### > THESIS

Students must earn a cumulative 3.50 GPA (or higher) and complete all requirements to graduate with honors. Those who drop below the required GPA for two consecutive semesters will no longer have Honors College privileges with, priority registration, supplemental advising, or guaranteed pursuit of thesis/scholarly work. These privileges will be reinstated if the cumulative GPA meets the 3.50 or above requirement.

### **Honors Contract**

For a variety of reasons, many courses campus-wide do not provide a specified section with an honors indication. Due to these situations, the Honors College offers the option of "Honors Contract", a signed agreement between the undergraduate student and the faculty of the designated course allowing the standard course to count for honors credit. The contract is beneficial by possibly affording some flexibility within a schedule, and, more importantly, is a viable option for a student to expand their curiosity and knowledge by exceeding the offered class information for courses of interest.

To establish a course for honors credit, there is a required procedure and forms to contract. The formwork must be completed and submitted within a rigid timeline and more information may be found on the Honors Contract site.

# **Davidson School Academic Regulations**

## **Curriculum Regulations**

- Earning a "C" or better in CHE 20500 is required to continue enrollment of subsequent CHE courses. Note: CHE 20500 cannot be retaken at another university.
- Students are permitted to enroll a required Chemical Engineering course up to <u>three times</u> which an enrollment includes a withdrawal ("W"). If a course is not completed successfully after the third enrollment, the student will not be allowed to retake it at Purdue <u>AND</u> is ineligible to continue pursuing a degree in the School of Chemical Engineering (BSChE).
- To graduate with a BSChE degree, student must have a minimum 2.00 GPA cumulative and 2.00 GPA in major coursework (all CHE), and minimum "C" in CHE 20500 and "C-" in all other CHE courses.

# **Pre- and Co-requisite Policy**

If a student fails to meet the grade requirement for a CHE course, and it is the prerequisite for another CHE course, but completed all the required work and took all exams, they may seek <u>permission of the instructor</u> of the subsequent course to enroll while retaking the "failed" course. Example: CHE 21100 and CHE 30600

\*\* This policy does NOT apply to CHE 20500 as it is an absolute <u>MUST</u> in earning a "C" or higher grade for eligibility to enroll in any other CHE courses. NO EXCEPTIONS.

COURSE	PREREQUISITES	CO-REQUISITES
CHE 20000		
CHE 20500 **	MA 16100 or 16500	CHM 11600
	PHYS 17200	
	ENGR 13100	
CHE 21100	CHE 20500	
	MA 26100	
CHE 30000		
CHE 30600	CHE 21100	
CHE 32000	CHE 20500	Math Selective I
CHE 34800	CHE 21100	CHM 26100
	Math Selective I	
CHE 37700	CHE 21100	Math Selective II
CHE 37800	CHE 37700	
CHE 40000		CHE 45600
CHE 42000		CHE 34800, CHE 37800
CHE 43500	CHE 30600	
	CHE 32000	
	CHE 34800	
	CHE 37800	
CHE 45000	CHE 30600	CHE 43500
	CHE 37800	
	CHE 42000	
	CHE 45600	
CHE 45600	CHE 37700	CHE 34800, CHE 37800

## Credit Transfer to Purdue and ChE

In some instances, for various reasons, a student may enroll a course through another institution. In the situation of doing so, student should check with their Academic Advisor to be aware of certain restrictions regrading coursework or how it may apply toward the following degree requirements.

#### 1. Chemical Engineering Required Courses

The faculty assumes a student will enroll all Chemical Engineering courses at Purdue University. If extenuating circumstances arise, and such course must be taken at another institution, the following regulations must apply:

- > Permission from the Undergraduate Committee to enroll must be received before taking the course.
- The providing Department/School of Chemical Engineering must be accredited.
- The course must be judged equivalent to the course it is replacing. This will normally be made by the instructor of the corresponding Purdue course; therefore, a detailed course syllabus must be provided.
- > Student must demonstrate significant hardship would result if the course has to be taken at Purdue.

#### 2. Elective Courses

Generally have more flexibility to transfer and apply toward degree requirements (non-University Core). If taking a course elsewhere, use the <u>Purdue Transfer Credit Database</u>, to view if/how Purdue accepts the course. The process is more streamlined if it is equated to a Purdue course, however, if it's not (HIST 1XXXX, etc.), submit the result to the Undergraduate Office for evaluation.

#### 3. University 32.0-credits of Upper Level Coursework

Purdue University requires all undergraduate students to earn a minimum of 32.0-credits of upper-level work, defined by coursework listed as 300 or higher, <u>at</u> the West Lafayette campus. Failure to do so results in being deficient in this degree requirement for graduation. While usually not an issue for ChE students, still monitor progress of course level when considering credit transfer from another institution.

#### **Eligibility and Process**

When coursework is completed at another institution, the eligibility of credit is dependent on these criteria:

- Credit was earned at a <u>regionally accredited institution</u>
- Coursework is of college-level (not remedial)
- > "C-" or higher grade earned, no exceptions

To establish the credit at Purdue, submission of the transcript may be done one (1) of three (3) ways:

#### 1. E-transcript

- ➤ The Registrar Office of the attended institution must send the transcript
- A secure and efficient e-transcript service sent to admissions@purdue.edu

#### 2. Mail

Must be sent direct from the attended institution to the address:

**Purdue University** 

Office of Admissions

475 Stadium Mall Drive

West Lafayette, IN 47907

#### 3. Deliver in person

- > Student may deliver transcript in a sealed envelope of institution's stationary
- Take the sealed envelope to the Office of Credit Evaluation in Schleman Hall

# **Special Course Regulations**

There are certain circumstances, processes, or regulations to be aware of when pursuing any of these courses, some of which are required for the degree while others are experience options to enhance the education:

Laboratory courses: CHE 34800, CHE 37700, CHE 37800, CHE 43500

These courses may not be added to a schedule after the first day of attached lab section.

#### Seminars: CHE 20000, CHE 30000, CHE 40000

Required of all students unless there is another course with a direct conflict. Permission must be obtained before enrolling in a course with a direct conflict.

Remedial courses (PHYS 14900, MA 15900, and CHM 11100) cannot satisfy graduation requirements.

#### Research Projects: CHE 41100, CHE 41200

Junior or senior standing. Permission of instructor required. Maximum 6.0-credits may be used toward degree requirements; 3.0-credits each Chemical Engineering Elective and 3.0-credits Engineering or Technical Elective.

#### Purdue Co-Op Program Courses

Student participation requires registration of a designated 0.0-credit course when off-campus on a work session and the course sequence is dependent on which certificate program is followed (3- v 5-term). Registration of course code resumes official full-time student status with the University allowing similar privileges as if on campus. Each Co-Op program has an approved tentative plan of study.

#### CHE 40100, Co-Op Seminar III

The final seminar course for Co-Op students on the 5-term rotation. This course, 3.0-credits, may be used toward Chemical Engineering Technical <u>or</u> Engineering Elective, but cannot meet the Chemical Engineering Elective.

#### Internship Courses: CHE 29699, CHE 39699

For domestic U.S. citizens, registration maintains full-time student status for official purposes even though offcampus on a work experience.

Non-U.S. citizens (Visa holders) <u>are required</u> to register the appropriate approved course, including summer sessions, to comply with INS rules. The internship must be approved by Dr. Gabriela Nagy (FRNY Go51).

#### Graduate Credit

Some 500- or 600-level courses, completed but not being applied toward undergraduate BS degree requirements, may be used for graduate credit. To enroll, the student classification must be of senior status (7/8) and earn a grade of "B" or better. The course instructor is required to file the authorization form, available in the Undergraduate Office – FRNY G041, during the semester of enrollment. The student's transcript will be audited after graduation, then authorized for graduate credit if deemed eligible.

# **Pass/No-Pass Option**

This option is allowed for General Education and Free Elective courses only and all other course requirements must be taken for a grade (CHE, etc.). The Pass/No-Pass (P/NP) provides an opportunity for students to broaden educational experiences of advanced courses with minimal concern for grades factoring into the cumulative GPA. This option may be added during the first four-weeks of a regular term and two-weeks of a summer session. Chemical Engineering students should consider the following when contemplating Pass/No-Pass:

- The first three (3) of the six (6) General Education courses should be taken for a grade
- Students interested in Graduate School, Med School, Law School, etc. should not enroll a course P/N
- Student has the same obligations as those who are enrolled in the course for credit with letter grade, and, when the instructor reports final course grades, he/she will report any student who would have earned a grade of A+, A, A-, B+, B, B-, C+, C, or C- as passed, and any other such student has not passed.

# **Retaking Courses**

Students may repeat a course for a variety of reasons, such as not satisfied with the grade earned in the course, but the following applies:

- Per the previously stated policy, students may only enroll a course up to three times. An enrollment includes establishing a "W" indication for withdrawal, which shows an enrollment of the course.
- When a course is retaken at Purdue, the old grade and credit are automatically excluded from the graduation index (overall GPA) and the new grade is calculated.
   NOTICE: University regulation dictates, the most recent grade <u>always</u> replaces the previous grade no consideration for which is higher. It's encouraged to discuss retake plans with your Academic Advisor.
- If an equivalent course is completed at another university, the transferred credit will satisfy the degree requirement, but will <u>NOT</u> replace the original grade in the GPA.
- As informationally stated on the mPP; "If you register and receive a grade for a course in which credit hours have already been granted, either by work at Purdue or by transfer credit, you will forfeit the credit for the previous course. However, until final grades are processed, your previous course will appear in the audit as usable credit. Also, institution credit always take precedence over transfer credit.

• The retake/repeated course may only be done in the same grade mode as the original course enrollment. Such as, if the course was previously enrolled for a grade, then the retake must be done as the same; conversely, if the course was originally taken with the Pass/No Pass option, the retake must be as well.

# **Special Exceptions to Regulations**

The prerequisite, co-requisite and graduation requirements have been carefully developed to ensure graduates receive a strong education in Chemical Engineering. Some degree requirements are set by the organization which accredits our program. However, undue hardship may occur if the rules are strictly enforced without regard for individual situations.

Thus, the Undergraduate Committee has the authority to make exceptions on an individual basis when petitioned by the student. Exceptions are made by weighing the degree of hardship which would be caused versus the educational deficiencies involved in allowing the exception. Exceptions requested merely for the sake of convenience are not granted. To exercise the right to petition for an exception, follow the procedure:

- 1. Discuss the exception need with your Academic Advisor to ensure the exception is necessary.
- 2. Write a letter of exception request addressed to the committee. Explain, in detail, what hardship will be caused if the exception is not granted and what you will do to make up for any deficiencies caused.
  - \*\* Please write in a professional format and proofread as this is an important business letter.
- 3. Submit the professional letter to the Associate Director of Undergraduate Studies in FRNY G041
- **4.** Students have the right to attend the Undergraduate Committee Meeting to present their case to support their exception petition, if deemed necessary. When the student is unable to appear at the scheduled meeting, the Associate Director of Undergraduate Studies will present on the student's behalf.

# **University Offices**

## Office of the Bursar

The <u>Office of the Bursar</u> is the student's one stop shop to view their billing invoice, make payments, and ensure they receive refunds in a timely manner (if applicable). Students can find valuable information on the <u>Bursar's</u> <u>web site</u> regarding tuition/fee rates, remissions, as well as a tuition calculator. It is encouraged to review the web site and discover answers to frequently asked questions. Please know the Office of the Bursar always has staff available to answer additional questions via email or phone.

## **Office of the Dean of Students (ODOS)**

This office, often referred to as <u>ODOS</u>, provides many assistive support services for the student population at Purdue University. Please refer to links for some of the services the office and staff provide, as well as their "Home" page to access all offerings:

- Academic Assistance
- Student Safety and Well-Being
- Student Legal Services

- Academic Probation
- Students Rights and Responsibilities
- Academic Integrity

# **University Policy Office**

This <u>web site</u> is the definitive source for the most current Purdue University system-wide policies. Policies duplicated on other websites or in print may not be the most current version.

Purdue University-West Lafayette, and its regional campuses, maintain additional administrative policies specific to their needs and structure. Individual colleges, schools and departments may adopt distinct procedures,

standards or guidelines, all of which must be consistent with these system-wide policies. Here are the Purdue University-West Lafayette **Student Policies** (non-academic).

# Office of the Registrar

A primary function is to support and provide academic and enrollment services to the Purdue University community. The "Registrar" is the official record-keeping office for the University and offers many resources and functions for students as well as staff and faculty. Helpful information provided regarding registration of courses, enrollment and academic rights are found through the <u>Office of the Registrar</u> with some of the more necessities for student assistance, such as:

- **Registration, "How to"** (links to all registration-related needs)
- Add or Drop Courses
- Academic Calendars (important dates throughout year for academic procedures; billing; etc.)

## **Student Regulations**

Previously known as "University Regulations, the now retitled <u>Student Regulations</u>, provides information for all Purdue students on the structure, policy, regulations, and procedures of the University that govern their relationship to the University in both academic and personal progress toward their ultimate educational goals. It is designed as a reference, with direct quotations from the University Code where applicable, covering the basic areas relating to all students on the campus.

# **Student Success Programs**

Empowering students to embrace a sense of lifelong learning by providing nationally-recognized, student-centered college success initiatives and services is the objective of this **program office**.

The department's various interconnected programs assist students in progressive stages of development; and have as their ultimate goals an increased rate of student **degree completion**, future **employment** or study, **dedicated citizenship**, and responsible **leadership** in the state, nation and world. Some offices housed in this area are the **Disability Resource Center** and **Veterans Success Center**, two very vital resources to our student population.

# **Center for Career Opportunities (CCO)**

This office informs and empowers students and graduates using transformative career services, innovative technologies and collaborative synergies to connect with professional opportunities within Indiana, the United States and the world. It is encouraged to visit the <u>CCO</u> web site, to set an account, and for access to career fairs, internship and career postings, resume' submission, and more, to set an