PURDUE UNIVERSITY | Davidson School of Chemical Engineering

Davidson School of Chemical Engineering

Undergraduate Program Guide 2020-2021

DAVIDSON SCHOOL OF CHEMICAL ENGINEERING
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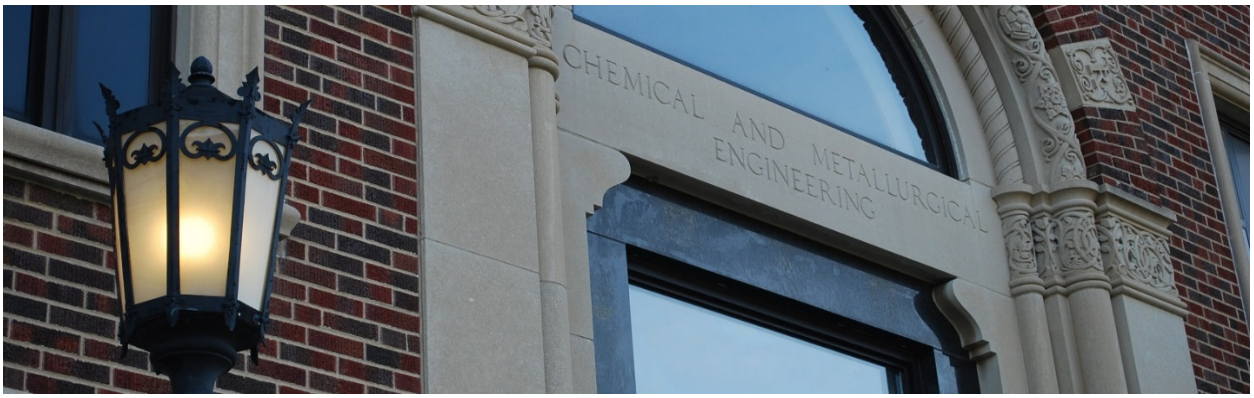

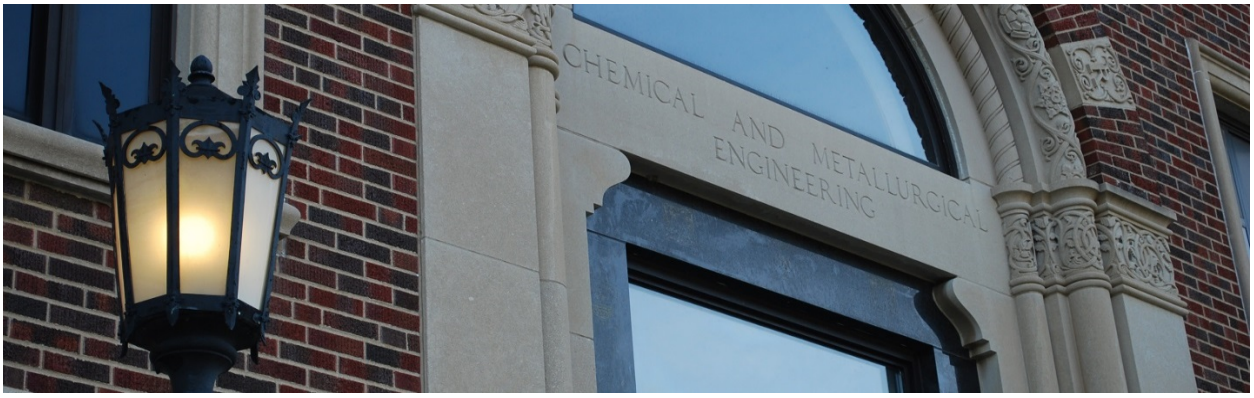

Welcome to Chemical Engineering!

The purpose of this guide is to aid our undergraduate students in following registration procedures, academic regulations, and understanding the requirements for the baccalaureate degree in Chemical Engineering. While this publication does not supersede any statements presented in the Purdue University Catalog, faculty documents, Office of the Dean of Engineering, or Office of the Registrar, it hopefully provides a summary and links to pertinent information in navigating the academic journey at Purdue University.

Your Academic Advisor will *assist* you with registrations, reviewing your academic plan, and fulfillment of graduation requirements for the BSChE degree. As stated by the University, *the final responsibility for completing the graduation requirements rests with the individual student*. This handbook guide and the *Schedule of Classes* published each semester should provide adequate information to the student for routine registration. In addition, students have a personal *myPurduePlan* (mPP), from which to view continuous progress for all academic pursuits, and a *Plan of Study* accessed with links to the University Catalog throughout this booklet. The University Regulations Reference Book may be useful for finding information regarding the academic calendar, credit transfer, 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.

CHE UNDERGRADUATE STUDIES STUDENT SERVICES TEAM

Virtual Office

Monday – Friday
8:30am – 12:00pm and 1:00 – 4:30pm
(765) 494-5650

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THE 'VIRTUAL' UNDERGRADUATE OFFICE

The student services office staff is dedicated to working with our undergraduate population with each Advisor and staff member, indicating specific cohorts or related responsibilities to our students:

- Karissa Raderstorf, Transfers, CODO and T2M
- Caryn Morgan, Study Abroad Liaison
- Allen R. Reigel, Co-Op Program students
- Sandy Hendryx, General questions, academic forms, tutors
- Dr. Gabriela Nagy (FRNY G051), Co-Op Program, Internships, and Instructor of all seminar courses

The Advisors utilize different communication methods to assist our students in academic advisement. A student may connect with their assigned Academic Advisor through:

DROP-INS

The ***first two weeks only*** of any semester the office operates without appointments to assist students with course modification, formwork, or other needs and requests ***concerning the current term***.

- The Advisors arrange available hours to accommodate their students as well as for duties to fulfill of other responsibilities, so they may be unavailable at the time of coming in outside of their posted hours. Sandy at the virtual front desk can suggest a time to return based on your Advisor's schedule.

APPOINTMENTS

Beginning the ***third week***, and for the remainder of the semester, unless otherwise communicated, students must schedule an appointment with their assigned Advisor. Students schedule appointment via *BoilerConnect* (link also in myPurdue) for various reasons such as plan of study, academic issues, etc.

- During "registration season", appointments are 15-minutes for audit of registration only
- If there are other matters to discuss, please set an appointment outside of those indicated dates

E-MAIL

For convenience and time, students may email their Advisor with general inquiries. These should be limited to questions necessitating short responses to address. Due to volume received, please be concise, and, while Advisors attempt to reply as soon as possible, but please allow 24-48 hours during certain times of a semester such as registration (do not expect responses during weekends, breaks or holidays).

Academic Advising

"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." – *Purdue University Advising*

In the mission of the university, the Davidson School of Chemical Engineering undergraduates are assigned to an Academic Advisor who works with the student through many academic related matters. The Advisor is the student's most utilized front-line resource throughout their education for reasons such as:

- Questions about the degree program, minors, concentrations, plans of study, etc.
- Study Abroad and how courses may apply toward degree requirements
- Personal issues interfering with academic performance
- Academic Probation/deficiency issues – poor performance in Chemical Engineering coursework
- Registration (required by the University)
- Questions about other resources on campus

In that capacity, students in Chemical Engineering can expect their advisor to:

- Explain degree and major requirements
- Discuss student's academic performance
- Assist with major exploration and interpreting degree requirements
- Empower student 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 navigate plan of study and requirements
- Inform about prerequisites for program courses
- Assist with long- and short-term goal setting
- Discuss personal and academic interests
- Establish a positive working relationship to provide a welcoming atmosphere at Purdue
- Teach how to analyze academic information and make well-informed choices
- Educate on various policies and procedures necessary to navigate the University
- Inform student of their responsibilities in the advising process
- Refer to campus resources/services as needed

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

- Know your Academic Advisor
- Communicate about research, study abroad, experiential learning goals for timely planning
- Check @purdue.edu email account daily
- Explore new and challenging opportunities
- Develop realistic short- and long-term educational and career goals
- Familiarize with campus resources, services
- Notify your advisor of any academic difficulties or changes in program interests
- Meet Advisor minimally once per semester and be prepared with courses and questions
- Review degree requirements and progress
- Be informed of Purdue and School of ChE academic policies and procedures
- Be proactive in your education; seek help at the first sign of concern!
- Accept there may be possible struggles in some classes. Work hard and communicate!

Registration

Purdue has a policy restricting students from accessing the registration system until having met their Advisor as required by appointment. The Undergraduate Office will send a campaign email through BoilerConnect about processes setting your appointment. The exception to appointments is reserved only for those students who are off-campus due to a Co-Op, Internship, or Study Abroad experience and done via email. *However, the ChE UG*

Office will continue to hold all meetings virtually until further notice to accommodate both those on and off campus.

Fall 2020 Registration Expectations

In preparation, students must indicate their course selections on the Course Registration Form (CRF), via Scheduling Assistant. The Advisor will audit the student's course selections against their myPurduePlan for positive progress. At the end of the appointment, the Advisor will provide access to the registration system until November 20, 2020. The student is also provided a PIN for system access during open registration dates. Find more information at *Pre-Registration FAQ's*.

BS DEGREE OUTLINE

The degree is comprised of two main fields; *Chemical Engineering major* and *Other Departmental* Courses, with the latter entailing three sub-areas. The official degree plans for each catalog term is on the *University Catalog*. Degree requirements and total credits for each degree field coincide with student's listed catalog term.

Chemical Engineering Major Core

- **2018 FALL or PRIOR**: 41-cr in the major for students admitted or entered with these catalog terms
- **2019 FALL and AFTER**: 46-cr in the major for students admitted or entered with these catalog terms
    - *Why a credit variance?* The 5-cr difference results from CHE 20000 and CHE 30000 now each 1-cr vs. 0-cr (prior to 2019) and addition the Chemical Engineering Selective (3-cr) into the
- Note: CHE 49700 and 59700 are temporary numbers assigned to newer material offerings and can meet Chemical Engineering Selective dependent on the content of the course (i.e. short Study Abroad does not)

Other Departmental Course Requirements

To further one's academic breadth, beyond their major technical study, these requirements provide students with a holistic education with a variation of subjects in providing foundational knowledge support for both major coursework and future collaboration encounters in industry. These requirements satisfy mandates as set forth by the University (UCC); School of Chemical Engineering; College of Engineering; and *ABET*.

It is important to understand for selective requirements, the approved courses have been identified based on the content and standard by the faculty, without regard to frequency offered. While these lists include active courses, not all are available in a given semester, so always reference "Look Up Classes" for offerings.

FYE: First-Year Engineering Core

MUST be successfully completed for *T2M* and *CODO* review. CODO's may be admitted without ENGR 13100/13200 coursework completed due to ineligibility to enroll previously as a non-FYE student.

Chemical Engineering STEM Core (36-credits)

- The *STEM Core* is necessary supplemental coursework for Chemical Engineering understanding. Selective option courses *must* be from the provided approved linked list to satisfy that requirement.
- Biology Selective (3-cr)
- CHM 26100 (3-cr), *Organic Chemistry I*
- CHM 26300 (1-cr), *Organic Chemistry Laboratory I* (registered separately)
- CHM 26200 (3-cr), *Organic Chemistry II*
- CHM 26400 (1-cr), *Organic Chemistry Laboratory II* (registered separately)
- CHM 37000 (3-cr), *Physical Chemistry*

- **_Engineering Selectives_ (6-cr) _See notes below_**
- MA 26100 (4-cr), *Multivariate Calculus*
- Math Selectives: *Linear Algebra and Differential Equations*; there are *seven available track options*
- MA 26500 (3-cr), MA 26600 (3-cr) the Department of Mathematics recommends this sequence
- A variation of accumulated credits is possible dependent on the track opted to follow
- PHYS 24100 (3-cr), *Electricity & Optics*
- *Technical Selective* (3-cr)

**** Chemical Engineering Selective and Engineering Selectives Policy ****

A maximum of 6-cr of research (CHE 41100, 41200, 49800, 49900, may apply toward:
→ Chemical Engineering Selective (3-cr) and Engineering Selective (3-cr) **OR**
→ Engineering Selectives (6-cr)
Credit may be established in *only one course*, due to similarity of material content
→ **ABE 58000 or CHE 52500**
→ **CHE 33000 or MSE 23000**
These courses *may not count* in the Engineering Selective requirement (as listed in mPP)
→**ABE** 20100, 21000, 30800, 37000 **or IE** 23000, 33000 **or ME** 30900 31500

General Education Selectives (18-credits)

As a longtime degree staple supporting of general education coursework, this field overlaps with requirements instituted in the University Core Curriculum (UCC); BSS, HUM, and STS (3-cr each). These are required of all undergraduates to ensure achieving common academic and foundational goals and must come from the *approved UCC course lists*. Additionally, there are General Education and General Education Upper Level requirements (9-cr total), from the *ChE approved list*, satisfying a diverse education as directed by ABET.

- Behavioral Social Science (BSS)
- Humanities (HUM)
- Science, Technology & Society (STS)
- General Education Selective (3-cr)
- Gen Ed Upper Level Selectives (6-cr)

GENERAL EDUCATION UPPER LEVEL SELECTIVES (6-cr)

As of Fall 2019, to ensure cohesiveness and consistency, students *must* select courses from this *approved list* to satisfy the intended degree requirement. The list has been expanded to also include courses from the departments of CSR, ENTR, MGMT, OBHR, TLI (for those which follow the requirement definition), as well as individual options of NUTR 30300 and FS 47000 for a range in choice availabilities.

What defines a General Education Upper Level course?
A course having a listed prerequisite of the same subject (i.e. PSY 20000; PSY 12000 prereq) or is listed as 30000-level and higher, which may or may not have a prerequisite (i.e. HIST 35100).

Are there possible exceptions for the requirement?
If a course appears to have relevant foundational content, but is not on the list, the student may submit the course syllabus and exception form through their Advisor for review by the Undergraduate Committee.

Suggested Pathway of Chemical Engineering Courses

This is considered the critical CHE course path, and, due to the layout of prerequisites and offerings, students should follow this outline, post-successful completion of First Year Engineering (FYE) in one academic year, to

graduate in the four-year timeline. CHE 20500 should be successfully completed by fall term of the 2nd year to avoid a heavy course load in the third-year Spring and fourth-year Fall terms. Deviating from this pathway, or not meeting course grade requirements, may result in an additional year to graduate.

FALL	2nd Year	SPRING	2nd Year
CHE 20000	(Fall only)	**CHE 21100**	
CHE 20500		**CHE 32000**	
FALL	**3rd Year**	**SPRING**	**3rd Year**
CHE 30600		**CHE 30000**	(Spring only)
CHE 37700		**CHE 34800**	
		CHE 37800	
FALL	**4th Year**	**SPRING**	**4th Year**
CHE 40000	(Fall only)	**CHE 45000**	
CHE 42000	(Fall only)	**CHE Selective**	
CHE 43500			
CHE 45600	(Fall only)		

CHE 20500 Enrollment & CODO and Transfer Students

* ENGR 13100 (prerequisite) must be successfully completed prior to CHE 20500 enrollment
* CHE 20500 may be taken *concurrently* with ENGR 13200, a FYE Core and degree requirement
* CHE 20500 is offered Fall and Spring semesters and Summer sessions

DEGREE ENHANCEMENTS

While the curriculum set forth is challenging and provides a strong foundation in the area of Chemical Engineering, in preparation to be productive and an asset in the industry, many students seek additional opportunities to integrate enhancements based on interests or career choice. Listed are ways for students to achieve enrichments within an academic setting along with, or as a substitute, to Co-Op or internship avenues.

Research

While research is not required for the degree, it is often pursued for selective degree requirements, and a facet of education bridging theory with application of knowledge from coursework into simulation of "real world" aspects while working closely with a faculty mentor. The School of Chemical Engineering has options for ***research and innovation*** allowing students to capitalize on experience and earn degree credit while expanding their perspective, application into products in Chemical Engineering, and enhancing their reporting and communication skill sets in preparation for industry and achieving the expectations of our graduates. These opportunities are highly recommended for those students seeking continued education of Masters and PhD.

Chemical Engineering Research, Internal

Many School of Chemical Engineering faculty are involved in research for discovery and impact to enhance contributions to their classroom and labs, industry and world communities. With these objectives, often faculty have opportunities for undergraduate students to pursue and combine their academics to application of everyday needs addressed by industry through experiential learning.
How to Register: In a professional manner, the student approaches the faculty with whom they wish to work based on the project or relation of their area of interest. Both parties must agree on involvement (hours/week; meeting frequency; other expectations) and fill out on official form, then student files the form electronically with the Undergraduate Office by the second Friday of the term doing research (first week of summer). Upon approval, the registration process will be provided at that time.

- ChE Research/Design Contract

Chemical Engineering Research, External-Related

Some Chemical Engineering students secure research with faculty in other campus departments. This is not discouraged as the presented experience can offer exposure of application of Chemical Engineering concepts and how it may be engrained in other fields, such as pharmaceuticals, foods, health, and more. The School of Chemical Engineering supports this notion and our students contributing elsewhere.

How to Register: If a student wishes to have their external research credit apply toward their ChE degree, and recognized as an appropriate CHE course, the student and external faculty must fill out a supplied form indicating the content of the research and how it integrates Chemical Engineering concepts. The student must file the application electronically with the Undergraduate Office on or before the Friday of the first week of the semester performing the research. The application will be reviewed by the faculty of the Undergraduate Committee for a decision in the second week.

- ChE Research/Design Contract: External Research Advisor

Minors

Many departments campus-wide offer a minor providing knowledge of an area supplemental to the degree, but not as extensive as the major allowing for completion usually without extending graduation based on start of study. When the minor requirements are successfully completed, as outlined by the offering Department, it is displayed on the academic transcript. While not all minors are available to all students, an official list of all active minors at Purdue is found on the catalog ***Undergraduate Minors page***. Please note additional claims and changes of requirements as determined by catalog term.

Contact the Department offering the minor for inquiries regarding requirement specifics.

To add a minor, contact your Advisor as most do not have an application process, with these exceptions:

- Computer Science: ***application and admission process*** (course and grade requirement), not guaranteed
- ECE: apply in person
- MGMT and ECON: registration restriction and prerequisites for upper-level course enrollment

Final audits of deny or completion and approval in awarding the minor is by the offering Department

Concentrations

Students may demonstrate a "focus" in one, or more, of five offered ***concentrations***. Each concentration consists of 9.0-credits of coursework and is an option to satisfying the Chemical Engineering Selective and Engineering Selective degree requirements. This provides an alternative to "randomly" selecting courses for identified requirements and pursue additional knowledge in a specific area of interest without adding coursework to their degree work. Upon successful completion, the indicated concentration is displayed on the transcript.

Study Abroad

Students who desire to pursue education with world-wide exposure, study abroad is the way to go! Purdue's ***Study Abroad Office*** is the main **resource specific to assisting a student's ambition.** Studying within other cultures, meeting people, and enlightenment to new countries is an integral part of being a student and Purdue nurtures student's learning through providing opportunities to these otherwise potentially rare experiences. The Study Abroad Office is the place for ***getting started*** in assisting with preparation to going abroad.

When on a study abroad program, the student is accountable with adhering to the academic policies of 1) the attending institution abroad, 2) Purdue University and 3) the School of Chemical Engineering, as if the student remained on the West Lafayette campus. A student who will study abroad must sign an agreement, with their Academic Advisor, to confirm their awareness of the outlined expectations and regulations, and other information resources, as stated on the form, to ensure satisfactory progress during their experience.

1. **Short Programs: School of Chemical Engineering Academic Policies**
   - These are programs during Spring Break, Winter Break and programs of 2- and 4-weeks in length
   - Credit earned in short programs may only apply to one of these degree requirements:
     - Technical Selective **OR**
     - General Education Selective **OR**
     - General Education Upper Level
   - Credits earned through School of Chemical Engineering and other College of Engineering programs, even of higher level, *may not* apply toward the Chemical Engineering Selective or Engineering Selective areas respectively

2. **Semester / Year-Long Programs and School of Chemical Engineering Academic Policies**
   - Student meets with the Study Abroad Liaison to:
     - Review possible ChE-related programs
     - *ChE Programs* have equated courses, as reviewed by our faculty, satisfying major requirements
       - The School of Chemical Engineering has agreements with these *institutions abroad* listed by country, their universities, and the courses previously equated
     - If an offered course at the institution has not previously been reviewed and recorded:
       - For each CHE course of interest, submit a syllabus for faculty evaluation
       - For each non-CHE course, submit the syllabus the respective schools and departments at Purdue for their determination
     - Sign forms of approved and intended courses and followed up with assigned Academic Advisor
   - The policy of CHE course sequence, and prerequisites, remains intact as if not participating abroad
     - If student earned less than the minimum requirement of "C-" in CHE 21100, then they may only enroll CHE 21100 (as a retake), if offered, and no subsequent Chemical Engineering courses may be enrolled per academic policy of the Davidson School of Chemical Engineering
   - Coursework may not be enrolled or completed out of sequence
     - If the highest course achieved prior to the program is CHE 21100, the student may not enroll CHE 37800 without first successfully completing the prerequisite of CHE 37700

HONORS PROGRAMS

Students who have demonstrated a strong academic ability and wish to conduct honors-level research with a Chemical Engineering faculty advisor may consider this approach in pursuit of an academic enhancement and challenge. The research is two semesters in length (Senior-year fall/spring), or, depending on the project, may opt for three semesters (Junior spring and Senior full-year). The student will write, submit, and defend a Thesis for the Distinguished Research honor and may choose from two tracks (see below).

Chemical Engineering Distinguished Research

A student may apply after reaching a "contract" with a faculty advisor on a research topic, have a minimum cumulative 3.50 GPA, and all listed courses completed with minimum "B-" on the *first attempt*:

Written Communication	CHE 20500	CHE 37800
Oral Communication	CHE 21100	Math Selective I
MA 26100	CHE 34800	Math Selective II
PHYS 24100	CHE 37700	

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

TRACK I

- **CHE 41100**, ChE Research
  and
- **CHE 49800**, Thesis Research I
  and
- **CHE 49900**, Thesis Research II

TRACK II

- **CHE 49800**, Thesis Research I
  and
- **CHE 49900**, Thesis Research II
  and
- *__CHE 50000__-level or higher elective

* CHE 54000, Transport Phenomena, is highly recommended for graduate program preparation

Honors College

When admitted into the Honors College, as a new incoming student, or after the first year, an Honors Advisor is assigned whom to work with for honors curriculum progress. It is the mission of the Honors College to support and foster well-rounded, well-educated global leaders. The College staff work to support student leaders on campus who impact society from their first semester and go on to enroll in the top graduate programs and receive the best employment their fields.

The Honors College ***curriculum*** consists of 24.0-credits honors-level coursework and a Thesis or Scholarly project in order to earn the distinction. Students must earn and maintain a cumulative 3.50 GPA or higher among completion of all outlined requirements to graduate with honors. Continue to work with the Honors Advisor to ensure the requirements and expectations are being met for progress or to avoid losing Honors College privileges.

Contract for Honors Credits

For various reasons, many departments campus-wide do not provide course(s) identified as honors (“H”). To aid in the accumulation of honors-level credit for students, the Honors College offers the option to “Honors Contract” a course. This contract is a signed agreement between the student and the course faculty outlining a higher-level of work or expectations allowing the otherwise standard course to apply as honors credit. The contract is beneficial with hopes of affording course flexibility within a schedule, and, more importantly, a viable route for a student to expand curiosity and knowledge by exceeding the original offered course material in courses of student’s interest.

To establish honors credit in a course, the ***Honors Contract*** has a required procedure and formwork for documentation. To ensure fairness to all parties involved, the formwork must be completed and submitted within a rigid timeline of the registered course semester.

ACADEMICS & REGULATIONS

The Davidson School of Chemical Engineering has academic regulations and policies in place, as designed by the faculty, to safeguard the reputation of the degree curriculum and educational preparedness of students.

Chemical Engineering Course Regulations

- **CHE 20500:** Students ***MUST*** earn a minimum "**C**" grade to meet the major requirement and as a prerequisite for eligibility of subsequent CHE courses; CHE 20500 *may not be completed elsewhere*
- A minimum grade of "**C-** "is required for satisfying all other listed CHE major core courses
- To graduate with a BSChE degree, a student must earn the minimum:
  - 2.00 Cumulative GPA; this is a calculation of all completed courses at Purdue University
  - Grade as specified for each CHE requirement
  - 2.00 Major GPA; this is a calculation of all Chemical Engineering courses
- Adopting University policy, the school allows enrollment of a repeatable course up to ***three (3) times***
  - Enrollment is defined as the establishment of a letter grade ("A"– "F") or withdrawal ("W")
    - *If a CHE course is not successfully passed after the third enrollment, the student is no longer eligible to continue pursuit of a degree in the School of Chemical Engineering*

Academic Policy of Pre- and Co-requisite Courses

As noted, all Chemical Engineering (CHE) core courses have a mandated minimum grade for satisfying the major requirement. If the minimum grade is not met, that CHE course must be *repeated while forfeiting enrollment of all subsequent coursework* for which the repeat course is a prerequisite.

- **Prerequisite:** Course(s) that *MUST* be satisfactorily completed *prior* to enrollment of subsequent course(s)
- **Co-requisite:** Course(s) that may be taken concurrently with subsequent course(s)
- **CHE 20500:** If minimum "C" grade is not earned, then it must be repeated with forfeiture of enrollment in CHE 21100 and CHE 32000, or any other course for which it is a prerequisite
- **CHM 37000:** CHE 21100 is a **prerequisite** (*not* corequisite); no exceptions! The School of Chemical Engineering policy supersedes the Department of Chemistry and student may not seek an override.

COURSE	PREREQUISITES	CO-REQUISITES
CHE 20000		
CHE 20500	ENGR 13100 MA 16100 or 16500 PHYS 17200	CHM 11600
CHE 21100	CHE 20500 MA 26100	
CHE 30000		
CHE 30600	CHE 21100	
CHE 32000	CHE 20500	Math Selective I
CHE 34800	CHE 21100 Math Selective I	CHM 26100
CHE 37700	CHE 21100	Math Selective II

CHE 37800	CHE 37700	
CHE 40000		CHE 45600
CHE 42000	CHE 37700	CHE 34800, CHE 37800
CHE 43500	CHE 30600 CHE 32000 CHE 34800 CHE 37800	
CHE 45000	CHE 30600 CHE 37800 CHE 42000 CHE 45600	CHE 43500
CHE 45600	CHE 37700	CHE 34800, CHE 37800

Pass/No-Pass Option

This can provide a student the opportunity to broaden their educational experience of advanced courses with minimal concern of grades factoring into the cumulative GPA. Adjusting the mode may be done within the *modification timeline* of a given semester. **Please consider the following with P/NP option:**

- **APPLIES ONLY** toward General Education Selectives, including Gen Ed Upper Level, requirements
- **Graduate or Professional School:** if considering, it is recommended *NOT* to enroll courses as P/NP
- The course obligations and expectations of the material is the same as if taking for a letter grade

Final Reporting:

- Pass ("P") is coded for those who would have earned an A+, A, A-, B+, B, B-, C+, C, or C- grade
- Not passed ("NP"), for those who would have earned lower than a "C-" grade
- "NP" indicates the *credit is not earned* and *does not meet the degree requirement*

Retake/Repeat of Courses

It may be determined to repeat a course for various reasons, such as; unsatisfied with an earned grade, failed course, or not meeting the identified grade minimum in CHE courses, but the following policies apply:

- M*ay only enroll a course for a maximum of three (3) times per University academic policy*
    - Enrollment is defined as establishing a letter grade or a "W" indicating a withdraw from the course
- When a course is retaken at Purdue, the previous grade is automatically *excluded* ("E") from contribution to the graduation index (overall GPA) and only the *most recent* grade established is calculated
    - University regulation dictates, the most recent grade *always* replaces the previous grade – no consideration is given to which is higher. It is encouraged to discuss retakes with Academic Advisor.
- If an approved equivalent course is successfully completed at another institution, the transferred credit will satisfy the degree requirement but *does not replace the original grade for GPA calculation*
- Statement on 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 takes precedence over transfer credit*."
- Credit may be established via AP exams, IB exams, and credit from other institutions and will show as "TR" on the Purdue transcript and myPurduePlan

- The repeated course may only be done in the same grade mode as the original course enrollment. Such as, if the course was initially enrolled for a letter grade, then the retake *MUST* also be for a letter grade; conversely, if originally enrolled as Pass/No Pass, the retake *MUST* be done in this mode as well.
- If repeating a course solely for grade improvement, it is encouraged to configure the affect the potential new grade may have on the overall GPA prior to spending time in repeating. Also, consider the original grade and the likelihood to drastically improve on that mark, as well as potentially earning a lower grade which would be utilized as being the most recent earned grade.
- Calculators to assist in factoring a "what if" GPA: **College of Science** or **School of Management**

Maximum Credit Limit

Students participating in BAND, ROTC or research may request an increase to their maximum credit limit via the Scheduling Assistant. Because increasing a student's maximum credit limit can lead to an extremely challenging semester, we review each request on an individual basis considering the students particular circumstances.

- Maximum credit limit for fall & spring – 18 credits
- Maximum credit limit for summer – 9 credits

Course Conflicts

On occasion, students request to enroll in courses offered at the same time. CHE does **not** allow time conflict overrides – unless the conflict is with BAND. Students participating in BAND may request this override via the Scheduling Assistant.

CHE Closed Courses

CHE does not use the Purdue wait list system for CHE courses. Should you have an issue registering for the required CHE courses, please place your name on the ChE Course Registration Issue Request link which will be available via the ChE Undergraduate Blog during registration. Please note that the wait list system for non-CHE courses is available during open registration until the 5pm Friday before the semester begins.

Override Requests

ALL override requests for CHE courses are handled through the Undergraduate Office.

Please do not contact the faculty, or the Head of the Department for permission. Should you need an override, please request the override via the Scheduling Assistant during your time ticket and it will be reviewed by the Associate Director of Undergraduate Studies.

Auditing Courses

Students wishing to audit a course may request an override to audit via the Schedule Assistant. Students will need to register for the course first, then adjust the grade mode for the course to audit. The Davidson School of Chemical Engineering will approve audit requests, if space is available, for CHE coursework during the second week of each semester.

Accommodations for Students with Disabilities

In order to make our department more inclusive and accessible and to uphold the requirements of the Americans with Disabilities Act, the School has established procedures to be followed by students who have a Letter of Accommodation (LOA) from the Disability Resource Center (DRC).

Please provide your ***ChE academic advisor and instructor*** a copy of your LOA (this is the instructor of your Lecture section, not a Teaching Assistant of your Lab, Recitation, or PSO). If you have the letter at the start of the term, we strongly recommend you give it to your instructor and academic advisor within the first two weeks of the semester. The ChE Undergraduate Office, is available under normal operations, to accommodate proctored exams and quizzes. Please note this service is not available with in ChE at this time and may be accommodated via the DRC testing center.

We recognize that a disability can occur at any time; therefore, we recommend that you give your academic advisor and instructor a copy of your LOA as soon as possible.

Exam Accommodations

1. Talk with your instructor and academic advisor as soon as possible if you are experiencing barriers, or anticipate experiencing barriers through the semester.

2. We prefer you provide a minimum of one week notice (i.e., submission of an LOA to your instructor and academic advisor) prior to the scheduled exam date to ensure the accommodations requested are available. If notification of an accommodation is not provided within a reasonable timeframe, a good faith effort will be followed to meet the requirements of the accommodation; however, it may take time to implement certain accommodations, resulting in a delay of access.

3. If you plan to take your exams at the DRC Testing Center, contact the DRC Testing Center in Young Hall 830 via http://www.purdue.edu/drctesting to start the appointment scheduling process. It is recommended you contact the DRC for scheduling well ahead of the exam date. Any questions about the Testing Center should be directed to the DRC Testing Center at drctesting@purdue.edu or 765-496-6168.

If you are unable to resolve issues with your instructor, please contact the Undergraduate Office, 765-494-5650 or feel free to contact your DRC Access Consultant at any time.

Special Courses

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:

CHE 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.

CHE Seminar Courses: CHE 20000, CHE 30000, CHE 40000

Required courses within the Chemical Engineering Major Core. As of Fall 2019, each is 1-credit.

Remedial Courses: PHYS 14900, MA 15900, CHM 11100

These courses cannot satisfy graduation requirements!

Research Projects: CHE 41100, CHE 41200

Permission of instructor required. A maximum of 6.0-credits may apply toward degree requirements – Chemical Engineering Selective *or* Engineering Selective *or* Technical Selective areas.

Co-Op Program Courses

Department permission required. Participation requires registration of a designated 0-credit course, for any term representing an off-campus work session. The course sequence is dependent on pursuing a 3- or 5-term certificate program and registration maintains official full-time student status with the University allowing similar privileges as on-campus terms. Each program has an approved tentative plan of study.

Co-Op Seminar Courses: CHE 20100, CHE 30100, and CHE 40100

When a student returns for an academic semester, they are required to enroll the seminar course corresponding with their program progress. The CHE 40100 course (3-cr) is the final seminar only for students *concluding the 5-term Co-Op Program* (3-term not eligible). This course may apply toward the Technical Selective *or* Engineering Selective requirement, but *may not* satisfy the Chemical Engineering Selective.

Internship Course: CHE 39699

For domestic U.S. citizens, registration maintains full-time student status for official purposes while off-campus for a work experience. Non-U.S. citizens (Visa holders) *are required* to register the appropriate course for any term *upon approval* to comply with INS rules. The internship must be approved by the Director of Industrial Education and submit a CPT application online with the Office of International Student and Scholars (ISS).

Graduate Credit

Courses of 500- or 600-level, successfully completed, but are not applied toward any undergraduate degree requirements, may be used for graduate credit. To qualify for graduate-level credit, the student must be of senior classification and earn a "B" grade or better. Also, the course instructor is required to file the authorization form, available in Undergraduate Office–FRNY G041, during the semester of enrollment. The student's transcript will be audited after graduation, then authorized to utilize as graduate credit if deemed eligible per the criteria.

SPECIAL REGULATION EXCEPTIONS

The prerequisite, co-requisite and graduation requirements have been carefully developed to ensure foundational building of material for success in sequence of coursework in which our graduates receive a robust and well-recognized education and degree in Chemical Engineering. In addition to our faculty, some degree requirements are established following outcome expectations as set forth by the accrediting organization. However, undue hardship may occur if the rules are strictly enforced without regard for unique individual situations. While a process is in place, it is *not guaranteed* an exception to a course or regulation will be authorized.

Thus, exceptions are considered on an individual basis when petitioned by the student. Exceptions are made by weighing the degree of hardship caused in adhering to the established policy 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, the student you must do the following:

Discuss the exception need with your Academic Advisor to ensure the exception is necessary
Complete the applicable exception form below explaining, in detail, the hardship caused if the exception is not granted and how to make up for any deficiencies caused in material

** Please write in a professional format and proofread as this is an important documented letter

Submit the letter to the Associate Director of Undergraduate Studies **electronically**

Approval of the requested exception is not guaranteed

ChE Course Exception Form

Should be submitted if a student is unable to create a workable schedule or an extenuating circumstance be presented with the required listed course on the BSCHE degree requirements. Example of exception requests include but are not limited to enrolling in PHYS 27200 in lieu of PHYS 24100, CHM 25500/25501 in lieu of CHM 26100/26300, CHM 25600/25601 in lieu of CHM 26200/26400, etc.

ChE Prerequisite Exception Form

ChE General Education Requirement Exception Form

Should an intended course of enrollment at Purdue not be included on the approved general education selective list, please submit the course syllabus and completed form indicating the requirement, or requirements, to be fulfilled. Courses taken at another institution, whether coming into Purdue as a direct or indirect course, but not included on the original listing, should do the same for evaluation including the course syllabus for each course to be reviewed.

ChE Concentration Course Exception Form

Should a Purdue course of possible enrollment not be included on the existing approved list, please have a syllabus submitted, if necessary, and complete this form indicating which concentration the course is to fulfill. Courses taken at another institution, including study abroad programs, brought into Purdue as a direct or indirect course, but not included on the lists, should be evaluated by including the course syllabus for each course to be reviewed. The Davidson School of Chemical Engineering faculty have devised and approved a curriculum adhering to accreditation guidelines while upholding the integrity of a conferred Purdue University.

UNIVERSITY OFFICES

Office of the Bursar

This is the student's one stop shop to view their billing invoice, make payments, and ensure scholarship payments and refunds are received in a timely manner. Students can find information on their ***site*** regarding tuition/fee rates, remissions, as well as a tuition calculator. It is encouraged to review for answers to frequently asked questions. Also, much of the student billing information is on their myPurdue account.

Office of the Dean of Students

Often referred to as *ODOS*, this office provides many assistive support services for our Purdue student population. Please refer to links for a sampling of services the office and staff provide; home page to access all:

- *Academic Assistance*
- *Student Safety and Well-Being*
- *Student Legal Services*
- *Academic Probation*
- *Students Rights and Responsibilities*
- *Academic Integrity*

University Policy Office

This office is the *definitive source* for the most current Purdue system-wide policies, and those duplicated on other sites or in print may not be the most current version. Purdue-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 which must be consistent within system-wide policies. Here are the Purdue-West Lafayette *Student Policies* (non-academic).

Office of the Registrar

The official University record-keeping office and offers many student, staff and faculty resources and functions as support and provision of academic and enrollment services and policies. Helpful information regarding course registration, enrollment and academic rights are found through the *Office of the Registrar* with some of the more necessities for assisting students, such as:

- *Registration* (registration-related needs)
- *Add or Drop Courses*
- *Academic Calendars* (process, billing, etc)
- *Current Student Information*
- *Textbooks*

Student Regulations

Previously "University Regulations", now *Student Regulations*, provides information to all students on 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 quotes from the University Code where applicable, covering the basic areas relating to all Purdue students.

Student Success Programs

Empowering students to embrace a sense of lifelong learning by providing nationally-recognized, student-centered college success *initiatives and services* the directive. The various interconnected programs assist progressive stages of development and have as ultimate goals: increased rate of **degree completion**; future **employment** or study; **dedicated citizenship**; and responsible **leadership**. The *Disability Resource Center* and *Veterans Success Center*, two vital resources for our students, are offices housed in this area.

Center for Career Opportunities

Informing and assisting students and graduates alike 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 *CCO web site*, to set up an account and for access to career fairs, internship and career postings, resume' submission, and more.

GLOSSARY OF PURDUE ACRONYMS

MPP	myPurduePlan
FYE	First Year Engineering
T2M	Transition to Major
CODO	Change of Degree Objective
CHE	Chemical Engineering course code
UCC	University Core Curriculum
TR	Transfer Credit
"P"	Pass (on the Pass/No Pass Option)
"**NP"**	No Pass (on the Pass/No Pass Option)

OFFICES

DRC	Disability Resource Center
OPP	Office of Professional Practice (Co-Op Programs)
ISS	International Student and Scholars
ODOS	Office of the Dean of Students