School of Chemical, Biological, and Environmental Engineering (CBEE)

College of Engineering

cbee.oregonstate.edu

Undergraduate Advising Guide

Bioengineering (BIOE)

Revised 9/16/20

This advising guide is intended to give an overview of the requirements for the B.S. Bioengineering degree in the School of Chemical, Biological, and Environmental Engineering (CBEE) at OSU. This major requires 192 credits for graduation and generally takes 4-5 years to complete.

Bioengineering is an interdisciplinary field that applies engineering principles and quantitative methods to the advancement of knowledge at the molecular and cellular levels through the ecosystem level, and to the development of new and novel biologics, materials, devices, and processes. In practice, bioengineers address issues in the broad areas of bioenvironmental, biomedical and bioprocess technology.

At many universities, life sciences and engineering are more or less parallel cultures, reflected in two almost completely disparate disciplines, where students in one have trouble taking courses in the other. At OSU, bioengineers are trained to work at the interface between these disciplines. Activities in bioengineering are inextricably linked to issues relevant to public health and confidence. Perhaps more than in any other engineering discipline, bioengineers must maintain an awareness of ethical issues in their field, and the patterns of thought that lead to moral judgment and decision-making. Further, the ability to communicate effectively with people from disparate disciplines, both inside and outside of science, is essential to bioengineers.

General questions? Email cbee.advising@oregonstate.edu

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Bioengineering 4-Year Plan (192 Credits)

Revised 9/16/20

Credits	First Year			Second Year			Third Year			Fourth Year		
	Fall	**Winter**	**Spring**	**Fall**	**Winter**	**Spring**	**Fall**	**Winter**	**Spring**	**Fall**	**Winter**	**Spring**
1	Chemistry CH 231 (4FW)	Chemistry CH 232 (4WS)	Chemistry CH 233 (4FS)	Organic Chemistry CH 331 (4FW)	Organic Chemistry CH 332 (4WS)	EE Fund. ENGR 201 (3FWS)	Biochemistry BB 450 (4FW)	Biochemistry BB 451 (3WS)	Biomedical Engr. Principles BIOE 340 (3S)	Bioengr. Prod. Design BIOE 491 (4F)	Bioengr. Prod. Design BIOE 492 (4W)	Bioengr. Proc. Design BIOE 490 (4S)
2												
3												
4						Process Analysis CBEE 213 (4S)		Transport II CHE 332 (3W)	Transport III CHE 333 (3WS)			
5	CH 261 (1)	CH 262 (1)	CH 263 (1)	Material Balances CBEE 211 (3FW)	Energy Balances CBEE 212 (3WS)		Transport I CHE 331 (4F)			Biochemistry Lab BB 453 (4F)	Bio-separations BIOE 462 (3W)	Engineering Elective (3-4FWS)
6	Differential Calculus MTH 251 (4FWS)	Integral Calculus MTH 252 (4FWS)	Vector Calculus MTH 254 (4FWS)					Social Justice & Ethics BIOE 420 (3W)	Biomat. & Biointerfaces BIOE 351 (3S)			
7											Bioengr. Laboratory BIOE 415 (3W)	
8				Physics w/ Calculus PH 212 (4FWS)	Physics w/ Calculus PH 213 (4FWS)	Statics ENGR 211 (3FWS)						
9							Thermo CHE 311 (3FW)			Bioreactors BIOE 457 (3F)		Biological Science Elective (3-4FWS)
10	Orientation CBEE 101 (3F)	COMM 111/114 (3FWS)	Physics w/ Calculus PH 211 (4FWS)					Technical Writing WR 327 (3FWS)	BIOE Elective (3-4FWS)			
11						Matrices MTH 264 (2)					BIOE Elective (3-4FWS)	
12				Anatomy & Physiology BI 231 (3F)	Differential Equations MTH 256 (4FWS)		Engineering Ethics CBEE 320 (3F)			Process Laboratory CBEE 414 (3F)		Synthesis (3FWS)
13	English Composition WR 121 (3FWS)	HHS 231 (2FWS)				Series MTH 265 (2)		Engineering Elective (3-4FWS)				
14			Engr. Comp. CBEE 102 (3S)						DPD (3FWS)			
15		PAC (1FWS)		BI 241 (2F) or MB 230 (4FWS)		Anatomy & Physiology BI 233 (3S)	Perspective (3FWS)			Perspective (3FWS)	Perspective (3FWS)	
16					Perspective (3FWS)							Synthesis (3FWS)
17												
18												

Pre-requisites for upper division coursework

Electives (6 credits bioengineering, 3 credits bioscience, and 6 credits restricted engineering electives)

Baccalaureate Core course not covered by major requirements (S/U grading allowed)

3FWS: Represents the credit hours (3) and the term the course is offered (Fall, Winter and Spring term respectively).

This advising guide is intended for scheduling only. Course offerings and requirements are subject to change. Please reference the OSU Online catalog for a complete list of degree requirements.

Required Courses for Bioengineering Major

Math

Course #	Credit Hours	Description	Prequisites	Terms Offered
MTH 251	4	Differential Calculus	MTH 112	FWS
MTH 252	4	Integral Calculus	MTH 251	FWS
MTH 254	4	Vector Calculus I	MTH 252	FWS
MTH 256	4	Differential Equations	MTH 254	FWS
MTH 264	2	Introduction to Matrix Algebra	MTH 252	FWS
MTH 265	2	Introduction to Series	MTH 252	FWS

Science

Course #	Credit Hours	Description	Prequisites	Terms Offered
BI 241 or MB 230	2 or 4	Anatomy & Physiology Lab (BI 24l) or Introduction Microbiology (MB 230)	BI 241: BI 231 (co), MB 230: none	BI 241:F MB 230: FWS
BI 231	3	Human Anatomy & Physiology	none	F
BI 233	3	Human Anatomy & Physiology	BI 231	S
BB 450	4	General Biochemistry	CH 332 or CH 336	FW
BB 451	3	General Biochemistry	BB 450	WS
BB 453	4	Biochemistry Lab I	BB 451	F
CH 231/261	5	General Chemistry + Lab	MTH 111	FW
CH 232/262	5	General Chemistry + Lab	CH 231/261	WS
CH 233/263	5	General Chemistry + Lab	CH 232/262	FS
CH 331	4	Organic Chemistry (CH334/5/6 can substitute)	CH 233/263	FW
CH 332	4	Organic Chemistry (CH334/5/6 can substitute)	CH 331	WS
PH 211	4	General Physics with Calculus	MTH 251, MTH 252 (co)	FWS
PH 212	4	General Physics with Calculus	PH 211, MTH 252, MTH 254 (co)	FWS
PH 213	4	General Physics with Calculus	PH 212, MTH 254	WS

Engineering

Course #	Credit Hours	Description	Prequisites	Terms Offered
BIOE 340	3	Biomedical Engineering Principles	CHE 332, BI 233 (co), CHE 333 (co)	S
BIOE 351	3	Biomaterials & Biointerfaces	BB 451 (co), CHE 333 (co)	S
BIOE 415	3	Bioengineering Laboratory	CBEE 414	W
BIOE 420	3	Social Justice, Ethics, & Engineering	CBEE 320	W
BIOE 457	3	Bioreactors	BB 451, CHE 333	F
BIOE 462	3	Bioseparations	BB 451, CHE 332	W
BIOE 490	4	Bioengineering Process Design	BIOE 457 (co), CHE 333	S
BIOE 491	4	Bioengineering Product Design	BIOE 490	F
BIOE 492	4	Bioengineering Capstone Design	BIOE 491	W
CBEE 101	3	Chemical, Biological and Environmental Engineering Orientation	-	F
CBEE 102	3	Engineering Problem Solving and Computation	MTH 112	S
CBEE 211	3	Material Balances and Stoichiometry	MTH 252, 2nd year engr standing	FW
CBEE 212	3	Energy Balances	CBEE 211, MTH 256 (co)	WS
CBEE 213	4	Process Data Analysis	CBEE 212	S
CBEE 320	3	Professionalism and Engineering Ethics	CBEE 212 or CBEE 280	F
CBEE 414	3	Process Engineering Laboratory	CBEE 213 (co), CHE 311, CHE 333	F
CHE 311	3	Thermodynamics	CBEE 212 or CBEE 280, MTH 256	FW
CHE 331	4	Transport Phenomena I: Fluids	CBEE 212, MTH 256	F
CHE 332	3	Transport Phenomena II: Heat	CHE 311 and 331	W
CHE 333	3	Transport Phenomena III: Mass	CHE 331 and 332 (co)	S
ENGR 201	3	Electrical Engineering Fundamentals I	MTH 252, 2nd year engr standing	FWS
ENGR 211	3	Statics	MTH 252, 2nd year engr standing	FWS

Elective Courses for Bioengineering Major

BIOE majors are required to take 6 credits of bioengineering electives, 3 credits of upper division biological science electives, and 6 credits restricted engineering electives. Students may substitute an additional bioengineering elective for the biological science requirement.

Bioengineering Electives (6 credit minimum)

Course #	Credit Hours	Description	Prequisites	Terms Offered
BIOE 440	3	Bioconjugation	BB 450	S*
BIOE 445	3	Surface Analysis	BIOE 351 (co)	S*
BIOE 459	3	Cell Engineering	BB 451, CHE 333	W

Upper Division Biological Science Elective (3 credit minimum)

Course #	Credit Hours	Description	Prequisites	Terms Offered
BB 314	4	Cell and Molecular Biology	BI 213, CH 331	FWS
BB 360	3	Introduction to Neuroscience	BI 213, CH 233, CH 263	W
BB 481	3	Macromolecular Structure	BB 450	F
BHS 316	3	Principles of Immunology	BI 213, MB 230	S
BHS 329	3	Mechanisms of Disease: Introduction to General Pathology	BI 212	S
BI 311	4	Genetics	BI 213	FWS
BIOE 440	3	Bioconjugation	BB 450	S*
BIOE 445	3	Surface Analysis	BIOE 351 (co)	S*
BIOE 459	3	Cell Engineering	BB 451, CHE 333	W
MB 302	3	General Microbiology	BI 213, CH 332	FWS
MB 416	3	Immunology	BB 450	F
MB 434	3	Virology	BB 451	S
MB 479	3	Fermentation Microbiology	BI 212, CH 332, BB 450, MB 302	S

Restricted Engineering Electives (6 credit minimum)

Course #	Credit Hours	Description	Prequisites	Terms Offered
BEE 320	4	Biosystems Analysis and Modeling	BEE 222, MTH 256	F
BEE 468	4	Bioremediation Engineering	BEE 221 or ENVE 322	W
BIOE 440	3	Bioconjugation	BB 450	S*
BIOE 445	3	Surface Analysis	BIOE 351 (co)	S*
BIOE 459	3	Cell Engineering	BB 451, CHE 333	W
CHE 312	3	Chemical Engineering Thermodynamics	CHE 311	WS
CHE 334	2	Transport Phenomena Laboratory	CBEE 213 (co), CHE 333 (co)	S
CHE 361	3	Chemical Process Dynamics & Simulation	MTH 256, CHE 331	W
CHE 445	4	Polymer Engineering & Science	Recommended: CH 332 or CH 336, MTH 256	FS
CHE 450	3	Conventional & Alternative Energy Systems	CHE 311	W
CHE 451	3	Solar Energy Technologies	CHE 311	F
CHE 461	3	Process Control	CHE 332, CHE 361	S
CS 446	3	Networks in Computational Biology	CS 261, CS 325 (co)	F
ENGR 212	3	Dynamics	ENGR 211, PH 211	FWS
ENGR 213	3	Strength of Materials	ENGR 211	FWS
ENGR 248	3	Engineering Graphics & 3D Modeling	-	FWS
ENVE 321	4	Fundamentals of Environmental Engineering	CH 232, MTH 256	S
ENVE 322	4	Fundamentals of Environmental Engineering	CH 232, MTH 256	W
ENVE 421	4	Water and Wastewater Characterization	ENVE 321 or ENVE 322	F
ENVE 422	4	Environmental Engineering Design	ENVE 421	W
ENVE 425	3	Air Pollution Control	ENVE 321 or ENVE 322	S
ENVE 431	4	Fate & Transport of Chemicals in Environmental Systems	CH 440 or CHE 331, ENVE 421	W

*Courses not offerred every year.

Baccalaureate Core Course Requirements

OSU requires completion of a set of Baccalaureate Core ("Bacc Core") courses, divided into 4 categories- Skills, Perspectives, Synthesis, and Difference, Power, and Discriimination (DPD). Some of these course requirements are met by technical courses within your major. Those Bacc Core requirements not fulfilled through technical course requirements are outlined below.

Skills (12 credits)

Course #	Credit Hours	Description	S/U Allowed
WR 121	3	English Composition	No
WR 327	3	Technical Writing	No
COMM 111 or 114	3	Public Speaking (COMM 111) or Argument and Critical Discourse COMM (114)	No
HHS 231	2	Lifetime Fitness for Health	Yes
HHS 24x or PAC	1	Lifetime Fitness or Physical Activity Courses	Yes

Perspectives (16 credits)

Course Categories	Credit Hours	S/U Allowed
Biological Science w/ Lab	4	No
Cultural Diversity	3	Yes
Literature & Arts	3	Yes
Social Processes & Institutions	3	Yes
Western Culture	3	Yes

Synthesis (6 credits)

Course Categories	Credit Hours	S/U Allowed
Contemporary Global Issues	3	Yes
Science, Technology, and Society	3	Yes

Difference, Power, & Discrimination (3 credits)- No S/U grading

Difference, Power, & Discrimination (DPD) Courses

All OSU undergraduate students are required to take a DPD course before graduation. Below is a condensed list of course offerings in DPD for BIOE students. BIOE students must take one of these DPD courses. Other university DPD courses that do not appear on this list will not be accepted towards the BIOE DPD requirement.

AG 301	Ecosystem science of Pacific NW Indians	3 credits
ANTH 251	Language in the USA	3 credits
ANTH 345	Biological and cultural constructions of race	3 credits
ANTH 451	Sociolinguistics	3 credits
ECON 383	The economics of discrimination	4 credits
ED 216	Purpose, Structure & Function of Education in a Democracy	3 credits
ENG 420	Studies in difference, power, and discrimination	3 credits
ES 212	Survey of Chicano/a-Latino/a studies III	3 credits
ES 213	Contemporary Latino/a culture and issues	3 credits
ES 216	Las presencia Mexicana en los Estados Unidos	3 credits
ES 221	Survey of African American studies I	3 credits
ES 223	Survey of African American studies III	3 credits
ES 233	Asian American Studies II: Activism & Empowerment	3 credits
ES 243	Native American experience in the 20th century U.S.	3 credits
ES 351	Ethnic minorities in Oregon	3 credits
ES 452	Ethnicity in film	3 credits
FW 340	Multicultural perspectives in natural resources	3 credits
H 465	Public health and women: social and policy issues	3 credits
HST 210	Religion in the United States	4 credits
HST 368	Lesbian and gay movements in modern America	3 credits
LING 251	Languages of Oregon	3 credits
MB 330	Disease and society	3 credits
PHL 280	Ethics of diversity	4 credits
PHL 380	The body, medicine and culture	3 credits
PS 363	Gender and race in American political thought	4 credits
PS 375	The civil rights movement and policies	4 credits
SOC 312	Sociology of the family	3 credits
SOC 426	Social inequality	3 credits
TA 360	Multicultural American Theatre	3 credits
TCS 200	Twentieth century realities: the U.S.	3 credits
WGSS 262	Introduction to Queer Studies	3 credits
WGSS 325	Disney: Gender, Race, Empire	3 credits
WGSS 414	Systems of oppression in women's lives	3 credits
WGSS 420	Hate, resistance, and reconciliation	3 credits

Advising Information & Policies

Advising Appointments

CBEE Advisors offer a few different appointment types for current and prospective students. Current students can book 20 or 50-minute advising appointments. For most students, a 20-minute advising appointment is appropriate for routine advising, including course planning, PIN obtainment, registration questions, and career advising. The 50-minute appointments are primarily recommended for students who need additional time to discuss academic standing (academic probation or suspension), transfer course articulations, 4-year plans, or study abroad course articulations.

We also offer 50-minute prospective and transfer student appointments, primarily intended for students interested in one of our majors at OSU but do not yet have a student account with OSU. These appointments can be booked up to 72-hours in advance. If you have transfer credits that you would like to discuss in your appointment, we recommend you email a copy of your transcripts to the advisor you book with.

Drop-In Advising

CBEE Advisors provide one drop-in time on weekdays. Please check our website for current drop-in times. These times are intended for students with quick 1-10 minute questions. Advisors will see students on a first-come, first-serve basis so you may not be able to see a specific advisor.

Drop-ins may be cancelled some days to conflicting university events or meetings. Always check our website for drop-in announcements: https://cbee.oregonstate.edu/undergraduate-advising/appointments.

Late & No Show Policies

If you are going to be late or are going to miss a scheduled an advising appointment, the best thing you can do is let your advisor know and/or cancel your appointment. We understand that you can have things come up in your lives that may lead to a missed appointment, and it really helps us if you can let us know when this is going to happen.

Late Policy: If you arrive to a scheduled advising appointment 5 minutes or more late, you may be asked to reschedule. If you arrive 10 minutes or more late, you must reschedule. When we reserve time for you, we require all of that time to provide you with the best quality work possible. We understand true emergencies happen, so please do your best to let us know if you are going to be late.

No-Show Policy: No penalty for the first time you do not come to a scheduled appointment. If you "no-show" on a second appointment, we will not give you your PIN for registration until the final day of Phase I registration. If you schedule an appointment and need to cancel, please contact your advisor.

General Questions?

We have a Frequently Asked Questions page (https://cbee.oregonstate.edu/undergraduate-advising/FAQs) where we aggregate common student questions. If you don't see the question you need on this page, please email us your questions at cbee.advising@oregonstate.edu.

9-Term CBEE Career Development Checklist

Second Year- Research

Fall

- ☐ Try to get involved in research. Research and reach out to at least three faculty about participating in research.
- ☐ Get your resume reviewed. Resume reviews can be done by the Career Development Center or by CBEE Advisors.
- ☐ Join the College of Engineering Leadership Academy!

Winter

- ☐ Look into research or industry internships for next summer. You can find internships on OSU resources like Handshake, or through other job aggregator sites.
- ☐ Attend an industry tour or apply for a job shadow.
- ☐ Visit each social media profile you have, and either edit your content or your privacy settings. It is time to put your professional foot forward.

Spring

- ☐ Attend an industry tour or apply for a job shadow.
- ☐ Prepare for the career events in the fall by attending a workshop about networking skills.
- ☐ Get your resume reviewed.

Third Year- Making Decisions

Fall

- ☐ Work in a research lab at OSU.
- ☐ Research and apply for industry internships for next summer.
- ☐ Discuss your career interests with your advisor.
- ☐ Attend the CBEE Career Reception.
- ☐ Attend the OSU Career Expo.

Winter

- ☐ Consider your overall career trajectory. Are you planning on getting a job after graduation? Graduate school?
- ☐ Research jobs and note skills that are required for the kinds of jobs that interest you.
- ☐ Narrow your career interest areas and research potential organizations for internships or jobs.
- ☐ Discuss elective selections and minors and how they fit into your career goals with your advisor.

Spring

- ☐ Participate in seminars or workshops on job search strategies such as networking and interviewing skills.
- ☐ Determine your career-related strengths and skills and what you have to offer an employer.
- ☐ Get your resume reviewed.
- ☐ Make plans for taking the GRE, if interested in graduate school.

Fourth Year- Job Search

Fall

- ☐ Finalize a version of your resume to take to career events on campus.
- ☐ Develop a list of prospective employers in your field.
- ☐ Start searching for and applying for jobs. Many large companies have long hiring timelines, so start now!
- ☐ Apply for graduate school, if interested.
- ☐ Attend the CBEE Career Reception.
- ☐ Attend the OSU Career Expo.

Winter

- ☐ Participate in seminars or workshops on job search strategies such as networking and interviewing skills.
- ☐ Discuss job searching strategies with your advisor or the Career Development Center staff.
- ☐ Visit job listing websites regularly.
- ☐ Apply for jobs.
- ☐ Meet with your advisor to perform a graduation check and confirm you are on track for graduation.

Spring

- ☐ Apply for jobs.
- ☐ Research information on realistic salary expectations.
- ☐ Go on interviews and evaluate offers.

Experiential Learning in CBEE

In today's workforce, in order to get a job, it is not enough to simply get a degree. Employers expect students to participate in a variety of experiential learning activities to make themselves career-ready upon graduation. We've outlined some of these activities below, as well as resources for planning towards your long-term goals. Remember, it is important to start thinking about your career early and often. Also, consult our 9-Term Career Development Checklist on the previous page for more information about the recommended activities for each term in your program.

CBEE Canvas Site

The CBEE Advisors and Industry Relations Coordinator have developed a Canvas Site designed to help students develop professionally and learn about the different types of opportunities they can take advantage of while at OSU. This site includes a link to a calendar of experiential learning events being offered through CBEE and OSU. It also includes tutorials on a variety of topics, as outlined below.

As a CBEE student, you should be automatically added to this Canvas Site. If you are a CBEE student and do not have access to this site, please contact Madison Webb.

Workshops & Seminars

OSU, the College of Engineering, and CBEE each provide workshops, seminars, and programs to help students develop their career skills. These events cover a range of topics from designing an effective resume to networking to interviewing skills. Some of these events can substitute for the requirement to see an advisor each term for your PIN. See our Canvas site for a complete list of events, including the events pre-approved for PIN obtainment.

https://career.oregonstate.edu/students/career-events
Also see **Upcoming Workshops & Events** module on the CBEE Canvas Site.

Undergraduate Research

Doing undergraduate research is a great way to start building your resume early in your time at OSU. Having research experience can also help you be more qualified for highly competitive industry internships, and it is also great preparation for students interested in graduate school. Getting involved in undergraduate research is often an informal process, so be sure to check out some of our resources to help clarify the process! Our Canvas site includes a step-by-step guide for getting involved in undergraduate research, including links to departmental research pages at OSU.

https://cbee.oregonstate.edu/careers/undergraduate-research
Also see **Undergraduate Research** module on the CBEE Canvas Site.

Industry Tours

Not sure about your career after graduation? Consider going on one of CBEE's industry tours! These tours are a great way to learn about the different kinds of industries related to your major and what kinds of jobs exist in those industries. Industry tours are offered throughout every term (except summer). Transportation is generally provided and space on these tours is limited. See our Canvas site for a complete list of upcoming industry tour opportunities!

https://cbee.oregonstate.edu/careers/tours
Also see **Upcoming Workshops & Events** module on the CBEE Canvas Site.

Job Shadows

For an even deeper dive into potential jobs, job shadows can be an excellent opportunity to see the realistic day-to-day experiences of working engineers. CBEE's job shadow program helps pair undergraduate students with job shadow experiences related to their interests. Try to do a job shadow as early in your program as possible, for maximum impact.

https://cbee.oregonstate.edu/careers/tours
Also see **Upcoming Workshops & Events** module on the CBEE Canvas Site.

Leadership Academy

The Leadership Academy is an innovative student experience developed and delivered with the strategic involvement and ongoing support of key corporate partners. The Academy accelerates students' development as leaders; increasing graduates' competitiveness for employment and propelling their future success as early career professionals.

https://leadership.engineering.oregonstate.edu/
Also see **Professional Groups & Memberships** module on the CBEE Canvas Site.

Industry Internships

Doing an internship in industry is one of the best ways to prepare yourself for getting a job after graduation. Internships are an essential way to develop skills that will make you a desirable candidate for jobs after graduation and will make you a better and more marketable engineer. These internships are often highly competitive, so make sure you are active in engineering activities on campus (undergraduate research, engineering clubs or projects) to help improve your chances of getting an industry internship.

Most industry internships are obtained in fall term for the following summer, so make sure you start looking into internships early each year!

https://cbee.oregonstate.edu/careers/industry-internships
Also see **Creating Your Resume**, **Writing a Cover Letter**, and **Career Fair** modules on the CBEE Canvas Site.

CBEE Careers

It's never too early to start thinking about your long-term career! Most engineers will pursue careers in industry, while some also choose to pursue academic careers. Below, you will find information about pursuing employment or graduate or professional school at the conclusion of your CBEE undergraduate degree.

Pursuing Employment

Most undergraduate students pursue employment in industry at the conclusion of their undergraduate degree. For those interested in this path, it is important to explore the different types of industry that hire within their discipline. Careers are not always neatly tied to a single degree program, so career exploration that starts early in your undergraduate degree can lead to more satisfying, successful careers. Career exploration can be done through participation in research, industry tours, job shadows, or internships.

Industry internships are pivotal experiences in preparing for a career in industry. Internships are a huge differentiator on your resume when you apply for jobs and allow you to explore different types of jobs within your discipline. If you are interested in going directly to employment after graduation, an industry internship is a must! Remember, for both internship and job applications, most applicants are hired during fall term. So plan to attend the CBEE Career Reception and the OSU Career Fair in the fall and look into internships as early as possible!

https://cbee.oregonstate.edu/careers/jobs
Also see **Creating Your Resume**, **Writing a Cover Letter**, **Career Fair**, and **Salary Negotiations** modules on the CBEE Canvas Site.

Graduate School

Graduate school can be beneficial to students striving for careers in industry or academia, particularly those who have an interest in research and development as a career. Some disciplines also have preferences for students with M.S. or Ph.D. degrees.

For students interested in a career in academia, particularly as a professor, a Ph.D. is a must. If you are interested in this path, it is imperative that you participate in undergraduate research during your time as an undergraduate student at OSU. The earlier you can get involved in research, the better! We encourage most students to consider undergraduate research at the conclusion of their first year.

https://career.oregonstate.edu/students/career-major-exploration/graduate-professional-school
Also see the **Undergraduate Research** and **Applying to Graduate School** modules on the CBEE Canvas site.

Medical School

Preparation for medical school can be achieved through a number of different degree programs. However, for most degree programs, additional prerequisites are required for an application to medical school. Please consult our Head Advisor, Kimberly Compton, if you are interested in pursuing pre-medical studies in addition to your engineering degree program.

https://cbee.oregonstate.edu/undergraduate-advising/curriculum

Important Links

CBEE Resources

CBEE Advising: http://cbee.oregonstate.edu/undergraduate-advising
Go to this site to book an appointment with your advisor! This page also contains general advising information and the latest copy of the advising guide.

CBEE Advising FAQs: https://cbee.oregonstate.edu/undergraduate-advising/FAQs
Frequently asked questions by CBEE students. Covers a range of topics from advising appointments to GPA requirements.

Research, Internships, and Careers: http://cbee.oregonstate.edu/careers.
Practical work experience in a research laboratory or in industry is essential to your future employment and educational goals. CBEE students have a variety of opportunities to develop laboratory skills and obtain career advice from faculty and peer mentors.

College of Engineering Resources

College of Engineering (COE): http://engineering.oregonstate.edu/
College of Engineering home page.

MY COE: http://engineering.oregonstate.edu/my-coe
Page with information about COE procedures and links to other OSU websites that are relevant to COE students.

Academic Support/Tutoring: https://engineering.oregonstate.edu/current-students/academic-support
Includes information about tutoring provided by the College of Engineering for a variety of science, math, and engineering courses.

OSU Resources

Student Online Services: https://myosu.oregonstate.edu
In your online account, you can register for classes, access MyDegrees, view & order transcripts, view account holds, and pay your student fees & tuition.

Catalog: https://catalog.oregonstate.edu/
The general OSU catalog contains information about all of the different major and minor programs at OSU, including course requirements and prerequisites.

OSU Schedule of Classes Searcher: https://classes.oregonstate.edu/
Use this tool to search for class availability sorted by term, requirement, subject, or campus.

Transfer Credits: http://registrar.oregonstate.edu/transfer-credits
General guide to transferring credits to OSU.

Transfer Course Search: https://adminfo.ucsadm.oregonstate.edu/prod/OSU_ADMTAM.P_tcs_splash_page
This tool allows you to search course equivalencies by the institution and course subject/number.

Registrar Forms: http://registrar.oregonstate.edu/forms
Forms relating to registration, grading, student records, veterans benefits, and graduation.