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Welcome to Oregon State University (OSU) and the School of Chemical, Biological and Environmental Engineering (CBEE). This handbook is intended to help you get settled and answer some of the questions you might have as a new graduate student in our school. If, after reading the contents, you have unanswered questions, please feel free to ask for help. The staff, faculty, and fellow graduate students in the School are available and willing to help solve any issues as they arise. Additional information on deadlines, procedures and requirements is provided by the current Oregon State University Graduate Catalog and Guide to Success which may be obtained from the Graduate School: [http://oregonstate.edu/dept/grad_school/](http://oregonstate.edu/dept/grad_school/).

Graduate students in CBEE are responsible for complying with the rules of the University, the Graduate School, the College of Engineering (COE) and the School. In some instances, the requirements of the school are more restrictive than those of the Graduate School. In such cases, the school requirements specified in this document will apply.

The faculty hopes that your time at OSU will be rewarding, memorable, and the beginning of a fruitful career in the engineering field.

Elisha Brackett, School Manager and Graduate Student Coordinator
Dr. Alex Yokochi, Associate Professor and Graduate Committee Chair

### FACULTY & STAFF CONTACTS

<table>
<thead>
<tr>
<th>Academic Faculty &amp; Staff</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td><a href="mailto:kreiderp@onid.orst.edu">kreiderp@onid.orst.edu</a></td>
<td>970-214-1399</td>
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<tr>
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<td></td>
<td><a href="mailto:graduate.school@oregonstate.edu">graduate.school@oregonstate.edu</a></td>
<td>541-737-4881</td>
</tr>
</tbody>
</table>
GETTING SETTLED

The School of Chemical, Biological and Environmental Engineering (CBEE) resides in the Gleeson Hall with satellite facilities in Merryfield, Graf and Owen Halls.

GRADUATE ORIENTATION PROGRAM

CBEE will hold an orientation session on September 18, 2013. This orientation will draw attention to some of the major components of this manual. This orientation is required for all incoming Graduate Teaching Assistantship (GTA) offer recipients.

BUILDING ACCESS

KEYS

Graduate students are granted the authority to carry building and lab keys. All requests for keys must be supported by an academic advisor. Key forms may be picked up in the Main Office from Charlotte Williams. The forms must then be taken to the Key Shop where you must present your student ID and the associated deposit (cash or check only). The Key Shop is located on 15th Street near Washington and is open Monday – Friday, Noon – 3:00pm.

The security of your keys is quite important for everyone’s safety. It is imperative that any loss of keys be reported immediately to the Main Office. You are requested to exercise the utmost care in the use of your keys. Under no circumstances should you lend your keys to other students or visitors.

AFTER-HOURS PASSES

Campus Security patrols all buildings periodically outside of building open hours (11 p.m. – 7 a.m.). Anyone without an After-Hours Work Permit and valid photo ID will be required to leave the building. Office and laboratory doors and windows are to be kept closed and locked when not occupied. Security patrols will lock any open, vacant rooms. Do not let anyone into the building after hours. Individuals who are authorized to be in the building after hours are issued appropriate access codes and keys. Anyone abusing this system will have his/her After-Hours Work Permit revoked.

Passes change color at the beginning of each academic year. You must obtain a new pass each year or risk being escorted from the buildings.

Passes must be obtained from the proper personnel for each building. For Gleeson, Graf and Merryfield Halls please see Charlotte Williams in the Gleeson Main Office. For Owen Hall please see Julie Barlow in Civil and Construction Engineering.

GRADUATE STUDENT OFFICES

CBEE graduate student offices are located in various locations of all four of the buildings we occupy. Offices are assigned by the School Manager in conjunction with your research advisor. There are limitations to space, therefore not all students will be granted office space nor guaranteed a computer. Students on graduate research or graduate teaching assistant
appointments will be given preference, with remaining students placed as space permits. For office assignments, see the School Manager listed in the Welcome section of this book. Once placed, please do not change your office space assignment without the School Manager’s approval.

Cleaning of the desk is the occupant responsibility. Please maintain a clean work environment and leave the desk cleaner than when you arrived. Cleaning supplies are available if needed. It is also expected that you will help to keep common areas and shared equipment in graduate student offices (microwaves, refrigerators, whiteboards, study tables, etc.) clean.

MAILBOXES
Each graduate student is assigned a mailbox located in Gleeson 102. U.S. mail is delivered directly to the Printing and Mailing Center where it is sorted and distributed to the remainder of campus. Campus mail arrives once daily at approximately 0900. U.P.S., FedEx and other freight carriers deliver directly to Gleeson 102 throughout the course of the day. Please check your mailbox regularly for notices, package notifications, returned homework, school circulars, and other information.

All packages are received in Gleeson 102. They will remain in the room until you pick them up. A notification will be placed in your mailbox alerting you to the arrival of a package. You will receive an email notification for package arrival if the package is unusually large or requires temperature control.

Please be sure that all packages and correspondence is addressed properly. The correct address for all mailing or shipping to CBEE is:

<YOUR NAME OR YOUR MAJOR PROFESSOR>
CBEE or your major designation (Chemical Engineering, etc)
102 Gleeson Hall
Oregon State University
Corvallis, OR 97331-2702

ADVISOR / MAJOR PROFESSOR
The respective program Graduate Committee Chairperson will act as or appoint an advisor for all incoming graduate students until a major professor is selected. During the Fall term, all research-active faculty will give short presentations about their research in CHE 507 (Seminar). You will then be asked to submit a list of those faculty you’d like to work with; these will be collated and students will be paired with major professors during Winter term.

Make an initial appointment to see your advisor prior to registering. Your advisor will help you plan your schedule and make sure requirements are fulfilled. **You are, however, ultimately responsible for seeing that you have fulfilled all the requirements necessary for graduation.** It is the responsibility of each student to propose a viable program and to ask a faculty member to become his/her major professor. A major professor must be chosen before the completion of 18 credits, typically by the end of your second term at OSU. The choice of a major professor should be given considerable thought, since you will have a close working relationship with this individual for the duration of your degree program, and close professional and personal contacts thereafter. You are expected to complete your degree program under your assigned advisor’s supervision.
Your major professor will guide your research efforts to completion and oversee all aspects of your graduate studies. The student is also responsible for actively seeking information about individual research projects. Good sources of information are the professors themselves or their graduate students.

**EMPLOYMENT/PAYROLL**

**NEW HIRES**
If a student is offered employment either via hourly work or an assistantship, new hire paperwork must be completed in order to receive payment for your services. The following steps must be taken:

1. Supervisor must contact School Manager with job specifics.

2. Report immediately to the School Manager to receive a new hire employment packet.

3. All employees must have a social security number in order to work. International students should report to the School Manager immediately to obtain instructions on applying for a social security number if you do not have one.

**TIMESHEETS**
Timesheets are found online at [http://mytime.oregonstate.edu](http://mytime.oregonstate.edu). Hourly students (ie. Graders, lab workers, etc.) must clock in/out for each shift. Timesheets are submitted on the 15th of each month. GRA/GTA and summer stipend appointments do not require a timesheet.

**PAYCHECK**
Payment is distributed on the last non-holiday business day of the month. Direct deposits are available and will take place on the same day. Payroll checks are distributed to the department via the daily mail delivery at approximately 9am. If you have opted for a paper check it will be placed in your mailbox upon arrival.

**HEALTH INSURANCE**
All Graduate Assistants are required to carry health insurance. Insurance may be provided by the university at a total premium cost of 15% to you as bargained for by the Graduate Student Union. University provided insurance may be waived as long as the student supplies documentation that the outside coverage is equal to or greater than the coverage provided by the university. For more information, enrollment forms, and premium rates, visit the Student Health Services website. Deadline for fall term signup is October 1.

For more information, please see [http://studenthealth.oregonstate.edu/graduate-assistant](http://studenthealth.oregonstate.edu/graduate-assistant).

Other student health and wellness resources on campus include:

- OSU Student Health Services ([http://studenthealth.oregonstate.edu/](http://studenthealth.oregonstate.edu/), 541-737-9355)
- OSU Counseling & Psychological Services ([http://oregonstate.edu/counsel/](http://oregonstate.edu/counsel/), 541-737-2131)
TELEPHONES

Long Distance Calls
An authorization code is required to make long distance telephone calls. You will be given a code by your major professor, if you are expected to make such calls as part of your day-to-day research work. The authorization code is unique and is intended for use only by the person to whom it is assigned.

Authorization codes must be kept secure and not given to other persons. Codes must not be used for personal calls or purposes other than those intended. Directions on how to make and charge personal calls are provided online via Network Services Telecom website:

http://oregonstate.edu/is/services/network-services/telecom

FAX MACHINE
A fax machine (541-737-4600) is available for student or work-related purposes. Long distance numbers require an authorization code. The fax machine is located in Gleeson 102. Please see the Main Office staff for assistance.

XEROX, OFFICE SUPPLIES, & SCANNER

CBEE provides a copier and document scanner, intended for research or teaching purposes only, in Gleeson 102. Anyone desiring to make personal copies will need to utilize resources available on the main floor of the Valley Library. It is important that the cleanliness and organization of the copy room be maintained; please do your part.

Copies for class or official use must be approved by a faculty member, but generally the class TA will make copies for class use. A copier code is required and can be supplied by the Instructor for whom the copies are being made.

The scanner is an HP scan-to-PDF machine on the counter. It will scan papers through an automatic document feeder, or a lid can be lifted and papers set on the glass. This machine is pre-programmed with the local email address book and will allow you to send a PDF to the desired email address.

Office supplies are for the use of faculty and staff members only. A stapler and hole-punch are available in the student lounge (Gleeson 107) for student use. These items should also be available in the various student office spaces. If any equipment is missing, please report it to the Main Office.

VENDING MACHINE
There is a Pepsi machine and snack foods machine located in the student lounge of Gleeson Hall (room 107).

The CBEE Student Club also has snacks for sale in this same room. Cans of soda are also available at $0.75 from the fridge at the opposing end. All of these sales are on the honor system and proceeds go to help raise club funds to support student activities. Your support is appreciated.

COMPUTER USE

Computer labs are available in most engineering buildings. They require an engineering account in
order to login. These computers maintain software for word processing, spreadsheet, and Internet connectivity applications. Options are available for remotely accessing research and other database or modeling software.

School computers are supplied on most graduate student office desks to allow you to perform your research activities and course work, and should not be used for games or other personal uses during normal business hours (8:00 a.m. - 5:00 p.m., Monday - Friday). After hours personal use, within reason (as described by University policy), is allowed as long as others do not need the computers for their research or class activities. Computer use supporting funded research takes priority over use for non-funded research or personal activities.

The undergraduate computer rooms (Gleeson 002 and Merryfield 107B) are reserved primarily for undergraduate student use for class and project work. Occasional, short-term use by graduate students is permitted on an as-available basis.

Do not copy ANY software onto the School’s computer hard disks without approval from the School Head and the Network Administrator. Software licensing and disk space availability are two issues that must be considered. The installation of your own personal copies of software on the School’s machines without permission exposes the School to an unacceptable potential liability and therefore cannot be allowed. Please ask permission for the installation and use of your personal software if it is important to your research or course work. Also, please do not copy any software from the School’s computers without permission. This, again, violates software licensing agreements.

**COMPUTER USE POLICY**

All use of OSU computer systems must conform to the University’s Policy on Acceptable Use of University Computing Facilities, which is located at:


OSU computer systems must not be used for any illegal activity, or for storage or distribution of copyrighted material (e.g. music, videos, e-books, etc.).

If you have any general questions about using University computers, please contact Jordan Jones in Owen 236 (541-737-6516), or e-mail support@engr.orst.edu for assistance.

**PARKING AND SHUTTLES**

Except in the open or pay lots, all motor vehicles parked on campus from 7 a.m. to 5 p.m., Monday through Friday, must display a valid parking permit. A student permit entitles you to park in Student parking areas (designated by a green sign) at any time. Parking in student/visitor lots is free between terms (including summer terms) only. On-street parking is available for up to 2 hours/day in the neighborhoods surrounding the OSU campus, and metered parking is available on Monroe St. (parking in these areas is enforced by Corvallis Police). All parking rules are enforced during posted hours, and citations will be given for unauthorized parking on or around campus.

For more information contact Parking Services at 541-737-2583 or see their web site at:
The OSU campus and surrounding areas are serviced by buses operated by the Corvallis Public Transit System (http://www.corvallisoregon.gov/index.aspx?page=884). All bus service is free, and the buses generally run at 30 minute intervals during the working day from Monday-Saturday (no service on Sunday). The “Beaver Bus” runs at night (typically 9:00PM to 2:30AM) Thursday-Saturday.

OSU provides a free campus shuttle service running continuously at 15 minute intervals on the OSU campus. Shuttles run from 7:30AM – 6:30PM Monday-Friday when school is in session (Fall, Winter and Spring terms), and service the major parking areas on campus. The shuttles do not operate during weekends or on holidays.

SafeRide (541-737-5000, saferide@oregonstate.edu) is a student fee-supported, on-demand vanpool service for students, staff and faculty working on campus at night. This service is free and runs from 7:00 PM – 1:00 AM in Fall and Spring term, and 6:00 PM to 1:00 AM in Winter term. SafeRide services most of the OSU campus and surrounding city areas.

SMOKING POLICY

OSU’s Corvallis campus is smoke-free. This includes quads, parking lots and all other footspace within the confines of campus. Please consult the map on the following webpage for the campus boundary: http://oregonstate.edu/smokefree/map.

SPECIAL SERVICES AT OSU

CAMPUS RESOURCE GUIDE

The campus resource guide is a list of services available to students and faculty. For details, please visit http://oregonstate.edu/dept/grad_school/resourceguide.php.

OSU GRADUATE STUDENT TASK FORCE

The graduate student group is dedicated to improving graduate student life in the OSU Chemical, Biological, and Environmental engineering department. Group activities and responsibilities include the planning of social events, administration of the graduate seminar series, representation on the faculty graduate committee, professional and social support structure for current, past, and future graduate students, and continued dedication to the overall improvement of the Oregon State CBEE Graduate Program. As a student led, student oriented group, active involvement and representation from all graduate students associated with the department is desired.
FINANCE AND ACCOUNTING

PURCHASING
There are several options listed below for purchasing supplies for OSU. Please contact your department accountant in 103 Gleeson to help you get started.

PURCHASING CARD (PCard)
The PCard is a quick and convenient way for units to obtain many of the items needed for day-to-day operations. Contact the department accountant to make purchases using the PCard.

PCards may be used only to purchase goods and some services for the institution. Such purchases must comply with OSU policies governing purchasing and credit card usage. There is a $4,999 dollar limit per transaction.

Restrictions: The following are prohibited uses of the card:
- Cash Advances
- Inter-Departmental Expenses
- Any Travel or Hosting Related Expense:
  - Transportation Fares - e.g. airfares, bus fares, train fares, ferry, etc.
  - Misc. Lodging Charges e.g. room service, movies, phone, laundry service, etc.
- Meals
- Food / Groceries
- Alcoholic Beverages
- Entertainment
- Weapons / Ammunition
- See a total listing of prohibited transactions on the Business Affairs website at: http://oregonstate.edu/fa/businessaffairs/accountspayable/visa_prohibited_uses

AUTO PAY VENDORS
OSU has store accounts at various local businesses where OSU faculty and staff may charge business expenses. The monthly statement of all invoices from the vendor is processed by central Accounts Payable rather than by individual departments.

- Obtain Index and Activity codes from department accountant before using store account; vendor will require OSU ID when making purchase;
- Make purchase, get itemized receipts, forward to BC accounting staff;
- Major participating Vendors are: Office Max, Office Depot, Grainger, VWR, Azumano Travel, Teel’s Travel Planners, Enterprise Car Rental, Robnett’s Hardware, Bi-Mart, & Corvallis Napa Auto Parts;
- For current list of vendors, see http://oregonstate.edu/fa/businessaffairs/staff/ap and click on Autopay Vendors.

OSU INTERNAL SERVICE/SUPPLIES
Below are OSU departments who provide supplies or services to other OSU departments and bill the receiving department. Check with your department accountant before you purchase or make reservations for:

- OSU Book Store (http://osubookstore.com)
• Surplus Property (http://surplus.oregonstate.edu/)
• Chemistry Store (http://chem.science.oregonstate.edu/chemistrystores)
• Printing and Mailing (http://printmail.oregonstate.edu/)
• OSU Motor Pool (http://motorpool.oregonstate.edu)
• Environmental Health & Safety / Hazardous Waste Pickup (http://oregonstate.edu/ehs/)

**DIRECT-BILL TO OSU**
Vendors send individual invoices to OSU department for supplies or services purchased by authorized personnel for operations.

- Check with vendors to ensure they will bill OSU before ordering
- Check with business center accounting staff for purchasing procedures
- Make purchase and submit receipts/packing slips to department accountant
- Department accountant will process individual invoices for payment as they are received

**PERSONAL REIMBURSEMENTS**
Use of a Departmental Procurement Card or OSU’s Auto Pay Vendors are the preferred methods for OSU business related purchases. On the occasion when logistical reasons or extenuating circumstances occur that preclude the use of normal OSU purchasing processes or protocols employees may (with approval from their manager) make small purchases (normally less than $100) with personal funds and then subsequently be reimbursed by OSU.

- Only purchases related to OSU business purpose will be reimbursed;
- Get itemized receipts, a personal credit card charge slip alone is NOT valid;
- Submit reimbursement request and backup documents to department accounting staff for processing.
- All reimbursements must be submitted for payment within 60 days of incurring the cost or within 60 days after the conclusion of the travel/field-work during which the expenditure was made

**Restrictions:**
- NOT for purchase of gift certificates
- NOT for test incentive payments
- NOT for incentive payments to Institutional Review Board (IRB) human subjects
- NOT for equipment rental

Purchases that have been made with personal funds will be reimbursed by OSU when the following documentation is provided.
- Documentation showing purchase and payment by the employee;
- Statement of University business purpose, including intended use

**TRAVEL**

**TRAVEL PLANNING**
Check with your department accountant before any travel.

Conference Registration:
Conference registration can be prepaid using the departmental procurement card. See your department accountant for instructions. If registration is processed on a personal card, you will be able to claim reimbursement only AFTER completion of the trip.
FOREIGN TRAVEL

International travel on grant funding
This should be authorized through OPAA (Office for Post Award Administration). Submit a Foreign Travel Authorization form to your department accountant prior to making travel plans. [http://oregonstate.edu/fa/businessaffairs/bcr#opaa](http://oregonstate.edu/fa/businessaffairs/bcr#opaa)

Restrictions apply to airfare, check with department accountant, see Fly America Act [http://oregonstate.edu/fa/manuals/gcg/209-09](http://oregonstate.edu/fa/manuals/gcg/209-09)

AIR TRAVEL

It is recommended that airfare for university travel is booked through one of the contracted travel agencies for direct billing to the university. Travel Agent contact information:
Azumano Travel: azcorvallis@azumano.com; 800-334-2929
Teel’s Travel Planners: travel@travel-planners.com; 800-824-1028

MILEAGE IN LIEU OF AIRFARE:
See your department accountant to verify whether specific trips are allowable using mileage in lieu of airfare. A quote for the airfare that would be purchased for the business trip is required. OSU will reimburse mileage up to the amount of the airfare and associated expenses that would have been paid for air travel.

GROUND TRANSPORTATION

Vehicle rental:
Cars can be rented through the University Motor Pool or billed through Enterprise or National. See your department accountant for billing instructions. Rental should be for economy or compact rate whenever possible.

Personal Vehicle:
Private vehicle mileage is reimbursed at the current published OUS rate. As of 1/1/2013, the current rate is $0.565/mile.

Parking:
It is the expectation that employees will utilize cost effective parking while in travel status. Parking at Portland airport is authorized up to the Economy Lot rate ($10/day).

MEAL PER DIEM:
Meals while in overnight travel status can be reimbursed at current per diem rates. Meal per diem varies by locality. Current rate by city and state can be viewed at the following link: [http://oregonstate.edu/fa/businessaffairs/travel/tres/per_diem_us_all](http://oregonstate.edu/fa/businessaffairs/travel/tres/per_diem_us_all)

Meals on one day trips (no overnight stay): Breakfast and/or dinner on a one-day trip are reimbursable to the employee as a taxable benefit when their itinerary supports departure/return time as 2 hours prior to/after their regular work shift. Per diem rates may be used. *Lunch is not reimbursed on a one-day trip unless it is a part of the meeting and the menu and cost are arranged by event organizers.*
**LODGING:**
Itemized receipts are required for lodging. Reimbursement can be approved up to the maximum per diem lodging amount. An exception for higher rates can be made for conference lodging with documentation showing conference lodging rate. Current rate by city and state can be viewed at the following link: [http://oregonstate.edu/fa/businessaffairs/travel/tres/per_diem_us_all](http://oregonstate.edu/fa/businessaffairs/travel/tres/per_diem_us_all)

**TRAVEL REIMBURSEMENTS** - Form at [http://oregonstate.edu/fa/bc/businessengineering/](http://oregonstate.edu/fa/bc/businessengineering/)
Reimbursement of allowable expenses must be submitted within 60-days of conclusion of travel. These include, but are not limited to lodging, meal per diem, mileage, car rental, parking, and commercial ground transportation. For receipt requirements or more information contact your department accountant.

**FACULTY**

A current listing of CBEE faculty and staff, and their contact information can be found at: [http://cbee.oregonstate.edu/faculty-and-staff](http://cbee.oregonstate.edu/faculty-and-staff)

**Árnadóttir, Líney**
*Assistant Professor.* Ph.D. Chemical Engineering (2007), University of Washington
Field of interest: surface interactions and catalysis through experimental techniques and Density Functional Theory-based calculations for renewable energy and sustainability; surface characterization of complex materials (thin films, biomaterials, corrosion surfaces) via surface analysis techniques (Time of Flight Secondary Ion Mass Spectrometry, X-ray Photoelectron Spectroscopy), and electronemistry for clean Hydrogen production and fuel cell applications.

**Baio, Joe**
*Assistant Professor.* Ph.D. Chemical Engineering (2006), University of Washington
Field of interest: Biomaterials Biomimetics Molecular self-assembly

**Bothwell, Michelle**
*Associate Professor.* Ph.D. Biological Engineering (1994), Cornell University
Fields of interest: Biointerfacial phenomena: preparation of interfacial coatings that will impart safe, efficacious function to implantable biomaterials; drug formulation and delivery strategies; and enzyme activity in the adsorbed state. Bioengineering ethics: professionalism; bioethics; and social ethics in engineering. Recruitment and retention of folks from traditionally underrepresented groups in engineering: K–12 outreach; and examination of difference, power and discrimination in engineering education and practice.

**Chang, Chih-hung**
*Professor,* Ph.D. Chemical Engineering (1999), University of Florida
Fields of interest: Electronic materials (Growth and Characterization), Integrated Micro–Chemical
Dolan, Mark  
*Associate Professor*. Ph.D. Civil and Environmental Engineering (1996), Stanford University  
**Fields of interest**: biological processes for the treatment of hazardous wastes, and on the fate and transport of organic contaminants in the environment. He specializes in aerobic and anaerobic microbial transformation of chlorinated solvents. He has been involved in a number of field demonstrations of aerobic cometabolic transformation of chlorinated solvents.

Harper, Stacey  
*Assistant Professor*. Ph.D. Biological Sciences (2003) University of Nevada Las Vegas  
**Fields of interest**: Novel approaches to predictive toxicology; assimilating and fusing information on nanomaterial–biological interactions to permit data mining, generate predictive knowledge and provide information to minimize toxicity; the relationships among currently disparate exposure, dose and toxicity data in animal systems (including humans) and the degree to which those relationships can accurately be extrapolated to other systems and exposure scenarios; novel tools to determine nanomaterial characteristics; biological activity and toxic potential of novel nanomaterials; as well as comparative physiology and toxicology.

Herman, Gregory  
*Associate Professor*. Ph.D. Physical Chemistry (1992), University of Hawaii–Manoa  
**Fields of interest**: detailed mechanistic characterization of heterogeneous catalysts using surface science techniques; advance fabrication methods and designs for solid oxide fuel cells; development of green manufacturing processes for displays and solar cells; development and characterization of novel optical and electrical materials; and advancement of flexible electronic manufacturing methods and applications. Currently his research focuses on the development of sustainable technologies for the production of materials, energy, and water resources using catalytic processes. Prior to joining OSU he held research staff and postdoctoral positions at Sharp Laboratories of America, Hewlett-Packard Corp., Pacific Northwest National Laboratory, and the Naval Research Laboratory.

Higgins, Adam  
*Assistant Professor*. Ph.D. Bioengineering (2008) Georgia Institute of Technology  
**Fields of interest**: Cell and tissue preservation technologies (cryopreservation, freeze drying, desiccation, hypothermic storage). Cell-based devices such as biosensors. Cell membrane permeability. Nucleation and crystal growth processes in multicomponent systems. Applications of microscale fabrication technologies in biology and medicine (e.g., bio-MEMS).

Jovanovic, Goran  
*Distinguished Professor*, Ph.D. Chemical Engineering (1979), Oregon State University  
**Fields of interest**: microscale technologies started in the late eighties when his team developed a semiartificial pancreas, a technology based on the cell encapsulation technique. Currently his research is focused in two microscale technology areas: development of microscale chemical reactors and separators suitable for the development of microscale based chemical processes (NSF), and the development of microscale biosensors devices (DARPA). Dr. Jovanovic is, also, leading research projects in the development of “Zero gravity-compatible chemical processes for long space missions” (NASA) and “Environmental microreactors for in situ deployment” (INEEL).
Kelly, Christine

Associate Professor, Associate Dean of Student and Academic Affairs (COE) Ph.D. Chemical Engineering (1997), University of Tennessee

Fields of interest: Biotechnology: Development of yeast and bacterial strains, through genetic engineering techniques, to produce valuable enzymes and products from waste biomass feed stocks. Optimization of cultivation conditions to achieve maximum product concentration. Effect of toxicants on wastewater treatment microbial communities. Teaching: regulation of drugs and medical devices, bioengineering design, and cell culture and tissue engineering applications.

Koretsky, Milo

Professor. Ph.D. Chemical Engineering (1991), University of California at Berkeley

Fields of interest: Electronic Materials Processing. Research interests in thin film materials processing, including plasma chemistry and physics, electronemical processes and semiconductor yield prediction. Teaching interests include integration of microelectronic unit operations into the ChE curriculum and thermodynamics. Dr. Koretsky also serves as the ChE advisor to the MECOP internship.

Levien, Keith

Associate Professor. Ph.D. Chemical Engineering (1985), University of Wisconsin at Madison

Fields of interest: Process Optimization and Control; Supercritical Fluids Technology. Methods to operate chemical processes using advanced computational tools and computers, typically involving fundamental process modeling; appropriate design of dynamic experiments; industrial-funded joint research program with the Department of Forest Products in the application of supercritical fluid technology to natural materials.

McGuire, Joseph

Professor. Ph.D. Chemical Engineering (1987), North Carolina State University

Fields of interest: Colloidal and interfacial phenomena in bioprocess and biomedical materials technology: biopolymer structure and function at natural and synthetic surfaces, biocompatibility, implant-induced thrombosis, bacterial adhesion and infection, and drug formulation and delivery.

Montfort, Devlin

Assistant Professor. Ph.D. Civil Engineering (2011), Washington State University.

Field of interest: Conceptual and Epistemological Undercurrents of Learning as a Process of Change

Nason, Jeff

Assistant Professor. Ph.D. Civil Engineering (2006), University of Texas

Field of interest: physical/chemical processes for the removal of particles from water and wastewater. Recent investigations have focused on the experimental measurement and mathematical modeling of how particle size distributions change due to simultaneous precipitation and flocculation during lime softening. Future research will continue to focus on the fate, transport, and transformation of particles and particle-associated chemicals in natural and engineered systems.
Radniecki, Tyler
Assistant Professor. Ph.D. Environmental Engineering (2005), Yale University
Field of interest: Molecular characterization of biological processes in engineered treatment systems, risk assessment of emerging contaminants and water and energy sustainability through the anaerobic treatment of wastewater. Current research projects include: characterizing the ecotoxicity of silver nanoparticles to nitrifying bacteria, assessing the ability of bacteria to develop antibiotic resistance after chronic exposure to environmental concentrations of pharmaceuticals, and enhanced methane production from the co-digestion of fats, oils and greases (FOG) in wastewater anaerobic digesters.

Rochefort, Skip
Associate Professor. Ph.D. Chemical Engineering (1986), University of California at San Diego
Field of interest: polymer engineering and science, with a focus over the last few years on biomaterials, and engineering education. He is Director of both OSU and College of Engineering Precollege Programs, is an OSU Honors College faculty,

Rorrer, Greg
School Head and Professor. Ph.D. Chemical Engineering (1989), Michigan State University
Field of interest: Biochemical Engineering, Bionanotechnology, and Biomass Conversion. Dr. Rorrer is part of the Biological and Environmental Systems Research Cluster.

Schilke, Karl
Assistant Professor. Ph.D. Chemical Engineering (2006), Oregon State University
Field of interest: Development of peptide-based bioactive surface modifications for biomedical devices, and applications of immobilized biomolecules in microreactors and lab-on-chip devices.

Semprini, Lewis
Distinguished Professor. Ph.D. Civil Engineering (1986), Stanford University
Field of interest: biological processes for the treatment of hazardous wastes, and on the fate and transport of organic contaminants in the environment. He specializes in field, laboratory, and modeling studies of aerobic and anaerobic processes for treating chlorinated solvents. His research efforts aim at integrating the results of field, laboratory, and modeling studies in order to effectively apply the technology in the field. He also performs research using naturally occurring radon-222 as a subsurface tracer.

Walker, Travis
Assistant Professor. Ph.D. Chemical Engineering (2013), Stanford University
Field of interest: study of various areas associated with transport in complex fluids and multiphase flow phenomena in chemical and biological systems.

Wildenschild, Dorthe
Associate Professor. Ph.D. Civil and Environmental Engineering (1996), Danish Technical
University
Field of interest: Physics and chemistry of flow and transport in porous media, generally applied to the subsurface environment. Her main focus is detailed and highly controlled experiments (addressing flow, mass transfer, microbial behavior, heat transfer, and acoustic and electrical properties) that can help us evaluate new theory and numerical models. She believes that very accurate experiments are needed to test theory and models alike, then uses numerical models to expand investigations beyond the potential constraints of experiments. Recent projects involve the use of x-ray microtomography and pore-scale modeling to evaluate pore-scale processes (interfacial characteristics, film formation, biofilm behavior) in porous media in the presence of multiple phases.

Wood, Brian
Professor. Ph.D. Civil and Environmental Engineering (1999), University of California at Davis
Field of interest: description of mass, momentum, and energy transport in natural and engineered multiscale systems. He also specializes in subsurface hydrology; bioremediation and biochemical processes; water and wastewater treatment; and sustainable design and engineering. Brian Wood’s current research projects include: (1) Experimental and theoretical work examining the transport of microorganisms in porous media from a multiscale perspective (NSF); (2) Theoretical work on the fundamentals of describing reactive solute transport in highly heterogeneous porous media systems (NSF); (3) Investigations of how biofilm structure affects solute transport and reactions in biofilm-imporous media systems (DOE).

Yokochi, Alex
Associate Professor. Ph.D. Chemistry (1997), Texas A&M University
Field of interest: Sustainable energy technologies; materials science and engineering; microfluidic and microelectromechanical systems. Expanded Research Interests: My interests lie at the interface of Materials Science and Engineering, Chemistry and Chemical Engineering to drive innovative solutions, especially those focused on developing sustainable energy and resource production technologies. These include microreactors for hydrogen and biodiesel production, hydrogen storage materials and fuel cell issues; advanced batteries and other electrical energy storage methods; and innovative approaches to aluminum metal production (electrowinning). I also have interests in the synthesis and application of advanced materials using bulk and thin film techniques, such as the preparation of bulk nanostructured and amorphous materials, and their characterization by diffraction techniques and ancillary methods.

RESEARCH FACILITIES AT A GLANCE

The School of CBEE is housed primarily in Gleeson Hall and Merryfield Hall on the OSU campus. The School also maintains research and teaching laboratories in Graf Hall and Owen Hall on the OSU Campus and shares laboratory space at the Microproducts Breakthrough Institute (MBI) on the Hewlett-Packard campus in Corvallis. Specific laboratories in CBEE are:

- Oregon Process Innovation Center (OPIC) for Solar Cell Manufacturing (MBI)
ACADEMICS

GENERAL INFORMATION

Graduate students are expected to read the academic policies governing graduate students listed on university websites, which include but are not limited to the Graduate Catalog on the Graduate School’s website and the Student Conduct Regulations. The information herein addresses only a few topics regarding those policies.

ACADEMIC PERFORMANCE

A graduate student is expected to maintain a grade point average of 3.00 or better in (1) each registered quarter, (2) each major or minor field in his/her program, and (3) in his/her overall cumulative graduate program at Oregon State University. Grades below ”C” (2.00) cannot be used on a graduate program of study. Failure to maintain these standards is considered grounds for terminating a student’s program and/or financial support. See the Dismissal From Graduate School section below for more details.

Note that an overall OSU GPA of 3.00 is required before the final oral or written exam may be undertaken.

GRADUATE ASSISTANTSHIPS

Graduate research or teaching assistants may be appointed on a term-by-term basis (3 months), an academic-year (9-month) basis or a full-year (12-month) basis. No appointment can be for less than 0.20 FTE (“full-time equivalence”) or more than 0.49 FTE. All graduate assistants are required to carry out the duties assigned by their faculty supervisor to justify their stipend. For example, graduate assistants on a 0.40 FTE appointment are expected to provide an average of 16 hours of service per week. This service may be in addition to the time required to complete the thesis research. Graduate assistants at other FTE levels would provide proportional levels of service.
University policy dictates that a graduate assistant (GRA/GTA) must be enrolled for no less than 12 credit hours in any term in which he or she is supported, except for summer term which requires a minimum of 9 credit hours.

Additionally, students who hold multiple jobs on campus may not work more than a total of 20 hours per week or 255 hours per term for all positions held. Maintaining a GPA of 3.00 or better is required in order for continued financial support.

**REGISTRATION**

Students register for courses online at the Student Online Services site:

https://adminfo.ucsadm.oregonstate.edu/prod/twbkwbis.P_WWWLogin

For convenience, students should have their proposed schedule (including CRNs) prepared at the time of registration. The OSU ID number and GAP or ONID login/password are required for registration.

**MINIMUM REGISTRATION REQUIREMENTS**

- **EVERY** student must register for a **minimum of 3 credits**, including
  - Any term in which a student enrolls.
  - The term in which a thesis or dissertation (MS or PhD) is defended or comprehensive oral exam (MEng) is taken.
  - Any term a student uses university space and facilities or requires supervision of the major professor, regardless of the student’s location (on-campus or Ecampus).
- **GTAs / GRAs must register for at least 12 credits** (Fall – Spring terms).
  - Auditing a class or enrolling in Continuing Higher Education and other self-support programs may not be used to satisfy enrollment requirements for graduate assistant tuition remission.
- **Students receiving financial aid** must contact the Financial Aid Office for specific registration requirements each term. Students must notify Financial Aid if they plan on enrolling less than full time.

Registration in research thesis credits (CHE or ENVE 503/603) is typical once any required graduate courses are completed.

**MAXIMUM REGISTRATION REQUIREMENTS**

- Graduate students can register for a maximum of 16 credits each term without formal permission. Students should always consult with the major professor about class schedules to ensure proper progression toward their degree.
- Students must receive written permission from their major professor and the OSU Graduate School to register beyond 16 credits.

**FULL-TIME AND PART-TIME ENROLLMENT**

- Full-time status is an enrollment of 9 credits per term (12 for international students).
- Part-time status is an enrollment of 5-8 credits per term.
  - Financial Aid for part-time graduate students is evaluated on the basis of their part-time enrollment; students must contact Financial Aid for specific requirements.
**TUITION BILLS**

Students are sent an email to their ONID email account when their statement is ready to view and can then view their eBill statement online at [http://mybill.oregonstate.edu](http://mybill.oregonstate.edu). All billing for currently enrolled students is processed electronically through eBill on the **5th** of each month.

Unpaid balances as of the **1st** of the month following the eBill statement are considered past due, and will be assessed interest at the rate of 1% per month (12% APR). Students are financially responsible for all courses for which they register. Students are responsible for paying fees by the deadline even if they do not receive a bill.

Please direct any questions about tuition, fees, and financial aid to the Business Affairs Office.

**LEAVE OF ABSENCE**

You must fill out a Leave of Absence form and have it approved by the Graduate School (at least **15 business days prior** to the start of the term) if you need to take off a term (Fall, Winter, or Spring) for any reason.

- You are limited to three leaves of absence during your program. Some students (e.g. military students called to duty) have more flexibility in the number of leaves allowed by the Graduate School.
- Notify the Office Manager if you need to take a leave.
- You never need to fill out a leave form for Summer term.
- If you do NOT fill out a leave form, you will have to reapply (including paying the application fee) **AND** register for 3 graduate credits for each term of the unauthorized break in registration and register for at least 3 credits for the term you are readmitted, e.g., 6 credits for one missed term.

* For more information about the Graduate School’s policies,
  - See the Graduate Catalog under “Policies Governing All Graduate Programs” and “Registration Requirements” **OR**
  - Contact the OSU Graduate School at 541-737-4881.

**SUMMER TERM**

Graduate Assistants on appointment during the summer term must register for a minimum of 9 credits (full-time enrollment). Research thesis credits (CHE or ENVE 503/603) are typical.

**DISMISSAL FROM GRADUATE SCHOOL**

It is imperative that all students read the Student Conduct Regulations to be aware of actions that may lead to the dismissal process: [http://catalog.oregonstate.edu/ChapterDetail.aspx?key=38](http://catalog.oregonstate.edu/ChapterDetail.aspx?key=38)

**BASIC REQUIREMENTS FOR ALL GRADUATE DEGREES**
**School Seminar:** All newly-enrolled graduate students are required to take the School seminar course (CHE 507) for the Fall term. For the ChE program, seminar is recommended for the following two terms. For the EnvE program, the seminar course is required for the first year. This is intended to develop your understanding of the profession, the research activities that take place in this School, and to develop presentation skills. Additional requirements may be set by the student’s major or minor professor, by the School, or by the student’s advisory committee as needed to strengthen his or her background.

**Graduate Minor:** OSU does not require graduate students in Engineering to pursue a minor. However, if desired, a minor may be selected. The minor may be a recognized school minor, a recognized integrated minor, or a student–designed/committee–approved minor. Minors appear on your transcript, but will not be listed on your diploma. Speak with your major professor for more details on minors.

**Program of Study:** All students are required to complete a Program of Study outlining the courses they will take to complete their degree requirements. The Program of Study is a contract between the student, the School, and the University (Graduate School). For the Master of Engineering Program (MEng), signatures are required by your major professor (by default, the Chair of the Graduate Committee) and your minor professor (if applicable). For degrees within the Master of Science (M.S.) Program, students must consult and receive approval (signature) from the individual major professor and minor professor. In the case of Doctoral Program (Ph.D.) degree seeking students, all committee members must approve the Program of Study. Students must then receive the signature of the School Head prior to submitting the form to the Grad School (see Sections: Master’s Program and Doctoral Program). **The Program form must be completed before you complete 18 credit hours of graduate study.**

Prepared forms signed by the advisor can be dropped off in the main office with the School Manager to obtain the School Head’s signature and be turned in to the Graduate School.

Visit the Grad School’s “Forms” website for a blank form and instructions on how to fill out the Program of Study. You may need to reference the Graduate Catalog for further details. [http://oregonstate.edu/dept/grad_school/forms.php#program](http://oregonstate.edu/dept/grad_school/forms.php#program)

**Advisor selection:** To file a graduate study program, a student must find a research advisor. During the Fall term, all the faculty members in CBEE offer seminars during the CHE 507 seminar course in which they will present their current research projects. Their interests and needs for students on projects will be described in each presentation.

At the conclusion of the fall term, students should make appointments to meet with those faculty members with whom they share interests. **Be sure to discuss financial support options with the faculty member when determining a proper fit and project.**

After meeting with the faculty members, the student must present a completed Advisor Selection Form to the Graduate Committee Chair (including a list of top three most preferred advisors). The selection process will be finalized prior to the completion of Winter term. The Graduate Committee Chair will send a letter to each student to inform him/her of the results of this process. The student must sign the “letter of intent” to work with the specific advisor. It is **not allowed** for any student to change his/her advisor after signing the letter, unless the student is placed under
extraordinary circumstances. If a student needs to change his/her advisor because of funding reasons, the student must file a petition with the Graduate Committee. The Graduate Committee will make a decision on a case-by-case basis.

If a student fails in finding a research advisor, the student may seek for a research advisor outside the School of CBEE. However, any research project offered in a different program must be approved by the School of CBEE in order to obtain an advanced degree in chemical or environmental engineering. If no advisor is determined, the student may transfer degrees to an MEng (coursework only) course of study and complete the program without a project.

For MS and PhD students, the Graduate Committee Chair is the advisor for all the new graduate students until they find their own research advisors. The School Manager will serve as the advisor for the MEng students, with the Graduate Committee Chair acting as signature authority. Whenever students have problems, they should refer all the problems to either the School Manager or Graduate Committee Chair.

**Ethics Training:** As an OSU and CBEE graduate student you will be required to complete the Responsible Conduct or Research for Engineers course offered by the Collaborative Institutional Training Initiative (CITI). OSU has contracted with this organization to offer ethics training for all graduate researchers. To complete the ethics course, find the CITI home page at https://www.citiprogram.org/default.asp?language=english, and register as a new user. You will need your OSU ID number and our campus address, which is 102 Gleeson Hall, Corvallis OR, 97331.

Register for the Responsible Conduct for Research for Engineers course, which contains 14 modules with a quiz after most of the modules. Modules should take about 30-45 minutes to complete. When you complete the course, send your completion report to Elisha Brackett (Elisha.brackett@oregonstate.edu), and she will note the training in your graduate student file. You will also have to provide this information on your program of study form under the ethical research training box. Your Program of Study will be held from submission to the Graduate School until completion of this training.

**Safety Training:** OSU’s Environmental Health and Safety department has prepared 8 modules related to safety training for researchers working in laboratories. CBEE is committed to a safe work environment and is using these modules to facilitate safety training.

As a CBEE graduate student you will be required to watch, learn and reflect on these training videos. These videos can be found at [http://oregonstate.edu/ehs/training/lab_safety_training](http://oregonstate.edu/ehs/training/lab_safety_training).

Below is a list of the videos of the videos, which total 97 minutes.

- Modules 1 and 2: Program Overview and Safety Concepts (37 minutes)
- Modules 3 and 4: Safety Equipment and Supplies (29 minutes)
- Modules 5 and 6: Chemical Use and Hazardous Waste (19 minutes)
- Modules 7 and 8: Emergency Response and Additional Information (12 minutes)

Over the Fall term watch each of these videos and prepare a summary of the important concepts and information in each video (four summaries total) using the template on the other side of this sheet to the Graduate Committee Chair. The chair of the graduate committee will review your summaries and note in your file when you have completed the training.
After you have completed the watching the four videos, acknowledge your training by completed the EH&S web acknowledgement form at:

http://oregonstate.edu/ehs/training/lab_safety_training_acknowledgement

RESEARCH INTEGRITY

Training in ethical research practices is an integral part of your graduate education, and is required as part of the Program of Study. Further information concerning Research Integrity, including University policy, can be found at the following website: http://oregonstate.edu/research/ori/index.htm

MASTER DEGREE PROGRAM

The School of Chemical, Biological and Environmental Engineering is made up of two graduate programs: Chemical and Environmental Engineering. The CBEE School offers the following types of Masters degrees:

- Masters of Engineering (MEng)
- Masters of Science (MS)

The CHE and ENVE degree options require a minimum of 45 credits to graduate; each with a set of core course requirements totaling 21 and 20, respectively. Additional credits above 45 may be required depending on the educational background of the student. All students must complete a Program of Study form (see Graduate School website) before completing 18 credits. All work must be completed within seven years, including transfer credits, course work, and the thesis / oral exam.

In addition to the formal requirements listed in the Graduate School Catalog (http://catalog.oregonstate.edu/), the CBEE School has policies listed below with regard to the course of study for each Master’s degree.

As with all policy matters, students have the right to petition for deviation from school policies to the CBEE School Graduate Committee. Such petitions must be made in writing, indicating the policy deviation requested and the reason(s) for the request. The decisions of the School Graduate Committee are final.

Masters of Science (CHE, ENVE)
A thesis in the major area is required for the MS degree, and the thesis format is bound by the rules of the Graduate School. Visit the Graduate School's website for details. Nine of the required 45 graded credit hours must be Thesis credits; more may be taken in order to fulfill GRA/GTA registration requirements.

Masters of Engineering (CHE, ENVE)
The MEng degree option provides students the opportunity to pursue advanced-level study without the requirement for a research thesis. A comprehensive oral exam is taken in lieu of the thesis requirement and core course requirements are the same as for the MS degree. These degrees are intended as terminal degrees, not as preparation for a doctorate, and will emphasize job-
related knowledge and skills. Although not required, students wishing to pursue a PhD one day are advised to pursue an MS degree, not the MEng.

**Minor Option (CHE or ENVE)**
A minor field of study is optional. If a minor is declared, however, the minor requirement specified by the Graduate School is 15 hours minimum. Master’s students are expected to take 18 hours or more of minor subject courses if the minor is “integrated”; i.e. it spans two or more schools. The CBEE School Graduate Committee may apply suitable CHE courses to such an integrated minor requirement as long as the CHE courses are not in your major area of concentration and they comprise less than one-half of the credits in the minor.

**MASTER’S THESIS**

The thesis demonstrates the student’s mastery of professional knowledge in a particular subject area of his/her chosen field. It must present innovative research or a novel application of a known methodology to appropriate problems. A conscientious survey of pertinent literature is a prerequisite to an acceptable thesis. The research topic must be approved by the major professor, and the research title must be registered with the Graduate School.

Since the thesis results from a significant body of work, the student is encouraged to publish the results of the thesis in the open literature. The student cannot schedule a defense exam with the Graduate School until the major professor approves the thesis for distribution to all committee members. Once approved, the student must submit a copy of the thesis to each committee member and complete the Event Scheduling Form with the Graduate School at least two weeks prior to the intended defense date. See your major professor for any other rules regarding thesis defense preparation requirements.

An MS candidate will be subjected to a two-hour final oral comprehensive examination, which includes a thesis research presentation and defense and questions on major, minor, and other pertinent academic subjects.

**Thesis Guide**

The Graduate School’s website has a complete guide to the thesis paper and the university requirements associated with the thesis. Students are encouraged to review the site, listed below, before starting to write the thesis to ensure understanding of the formatting, procedures, and deadlines. [http://oregonstate.edu/dept/grad_school/thesis.php](http://oregonstate.edu/dept/grad_school/thesis.php)

Note that the Graduate School takes the formatting, content and other requirements for the thesis (and especially the “pretext pages”) very seriously. Failure to strictly adhere to these requirements may result in your printed thesis being rejected by the Graduate School.

**Thesis Binding**

The school requires one copy of each thesis, in the format required in the Thesis Guide, to be provided to the Main Office prior to departure. The School will take care of binding the copy provided to us. If your advisor would like a bound copy, an unbound copy may be provided to the
Main Office at the same time and we facilitate the binding. In this case, you must provide the index number the faculty member wishes to charge the binding services to. Students wishing to bind a personal copy are welcome to do so at the same time. A personal check made out to the following binding service must be provided at the time the thesis copies are turned in to the Main Office. Checks should be made payable to:

Cyrano’s       Phone: 541-752-0469
361 SW 2nd Street       Website: www.stpcyranos.com
Corvallis, OR 97333     E-mail: stpcyrano@hotmail.com

THESIS DEFENSE COMMITTEES (MS STUDENTS)

1. The principal authority over a student’s program resides with the student’s Master’s Committee. This committee is responsible for:
   • assuring that University and School requirements are satisfied; and
   • administering the final oral examination.

2. The Committee consists of at least 4 members:
   • the student’s major professor;
   • one other CBEE faculty member;
   • the student’s minor professor, or if no minor is selected, committee member may be from graduate faculty at-large; and
   • the Graduate Council Representative.

Note that the composition of a student’s Master’s Committee MUST be approved by the major professor.

3. The committee is originally formed, with approval from the major professor, at the student’s invitation. The Graduate Council Representative is selected from a list provided by the Graduate School. The Graduate Council Representative is required to attend the final examination (thesis defense). Information on the role and duties of the GCR, and how to choose one, can be found at:

   http://oregonstate.edu/dept/grad_school/degreecommittee.php#council

NON-THESIS COMPREHENSIVE ORAL EXAM (MENG STUDENTS)

The following guidelines are written to help the student prepare for the oral exam. In addition to these guidelines all rules of the Graduate School pertaining to final master’s oral exams must be adhered to.

1. The exam committee shall consist of the following:
   • the student’s major professor (the Graduate Committee Chair may serve this role);
   • one other CBEE faculty member; and
• the student’s minor professor, or if no minor is selected, committee member must be from
the school.

Note: No Graduate Council Representative is required for the MEng oral exam.

2. You must contact members of the committee to arrange the date, time and place of the exam,
then schedule the exam with the Graduate School not less than two weeks before the
examination using the Exam Scheduling Form. The exam should be scheduled for two hours.

3. The exam will consist of a 30 minute presentation prepared and delivered by the candidate that
provides a meaningful evaluation and reflection on experiences gained in coursework
completed toward the degree, followed by questions from the committee on the candidate’s
presentation and knowledge gained from the candidate’s coursework. The 30 minute
presentation should highlight the following items:
   a. A statement of the candidate’s professional goals for obtaining the MEng degree.
   b. An overview on how the MEng coursework, including both Major and Minor areas,
      provided the preparation needed to achieve the candidate’s professional goals.
   c. A highlight of examples from class projects, homework, job search efforts, etc. that
      illustrate and elaborate on Item 2.

The MEng candidate must also provide a two-page MEng Coursework Program Summary
Statement that highlights items 1 to 3 above, to be handed in at the beginning of the Final Oral
Examination.

PREREQUISITE COURSEWORK REQUIREMENTS

At a minimum, the following courses must be taken for each program prior to enrollment in the
core graduate course curriculum. Your academic advisor should be consulted to ensure the
proper pre- and co-requisite path is taken.

Environmental Engineering
An M.S. candidate without a B.S. degree in Environmental Engineering (or equivalent Engineering
degree) must take the following courses in addition to the ENVE core:

Pre-requisite courses (completion required before taking ENVE core courses)
• Math through Differential Equations
• One year of General Chemistry
• One year of Physics
• CBEE 211 (3) Material Balances and Stoichiometry

Co-requisite courses
• ENVE 521 (4) Water and Wastewater Characterization**
• ENVE 522 (4) Environmental Engineering Design**
• ENVE 531 (4) Fate and Transport of Chemical in Environmental Systems
• CE 547 (4) Water Resources Engineering I: Principles of Fluid Mechanics

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**Note: credits earned for ENVE 521 and ENVE 522 will not be counted toward the 45 units needed for graduation.

*Chemical Engineering*
An MEng or MS candidate with a degree in Chemistry or other non-chemical engineering undergraduate degree must take the following courses in addition to the CHE core:

Pre-requisite courses (completion required before taking CHE core courses)
- Chemistry including General, Organic, and Physical
- Math through Differential Equations
- One year of Physics
- CHE 331 (3) Transport Phenomena (Fluid Flow)
- CHE 312 (3) Chemical Engineering Thermodynamics
- CHE 332 (4) Transport Phenomena II (Heat Transfer)
- CHE 443 (4) Chemical Reaction Engineering

**MS / MENG IN CHEMICAL ENGINEERING**

a) At a minimum, the student’s program shall contain the courses below (or be able to show equivalency);

b) Students without an CHE background must take all of the pre-requisite courses above (or be able to show equivalency); and

The remainder of the student’s major program can be a compilation of any other 500 or 600 level classes as APPROVED by the major professor. Note that at least 21 credits must be graded graduate level CHE courses (not 400/500 “slash” courses).
# M.Eng. Degree Curriculum in Chemical Engineering

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**Available CBEE Electives**
- CHE 545
- CHE 544
- CHE 517
- CHE 611
- CHE 551
- CHE 550
- CHE 581
- CHE 581

**Notes:**
- CHE Core (21 cr): CHE 507, CHE 514, CHE 520, CHE 525, CHE 537, CHE 540
- CHE 507 Seminar is required for fall term, very strongly recommended for winter/spring terms.
Engineering Specific (9 cr): Any graduate level course offered by the College of Engineering.
2 additional seminar credits can be used towards these credits
Graduate Minor (15 cr): Any graduate-level course, typically 4-5 courses, These are your most flexible credits.

** Slash course 443/543. Cannot be taken for graduate credit. Does not meet Graduate School stand-alone requirement.

M.ENG. DEGREE CURRICULUM IN CHEMICAL ENGINEERING FOR CHEMISTRY UG MAJORS
(all non-chemical engineering majors use this curriculum in combination with advice from your academic advisor)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Winter</strong></td>
</tr>
<tr>
<td>1</td>
<td>CHE 507 Grad Seminar 1 cr</td>
</tr>
<tr>
<td>2</td>
<td>CHE 331 UG Fluids 3 cr</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CHE 443 UG Reaction Engineering* 4 cr</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Grad Minor Elective 3-4 cr</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>

Available CBEE Electives
- CHE 545
- CHE 611
- CHE 544
- CHE 551
- CHE 517
- CHE 550
- CHE 581
- CHE 581
- CHE 540
- CHE 537
- CHE 525
- CHE 514
- CHE 520
- CHE 537
- CHE 540

Notes:
- CHE Core (21 cr): CHE 507, CHE 514, CHE 520, CHE 525, CHE 537, CHE 540
- CHE 507 Seminar is required for fall term, very strongly recommended for winter/spring terms.
- Engineering Specific (9 cr): Any graduate level course offered by the College of Engineering.
- 2 additional seminar credits can be used towards these credits
- Graduate Minor (15 cr): Any graduate-level course, typically 4-5 courses, These are your most flexible credits.
**Slash course 443/543. Cannot be taken for graduate credit. Does not meet Graduate School stand-alone requirement.**

# M.S. Degree Curriculum in Chemical Engineering

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>cr</strong></td>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>1</td>
<td>CHE 507 Grad Seminar 1 cr</td>
</tr>
<tr>
<td>2</td>
<td>CHE 540 Grad Reaction Engineering 4 cr</td>
</tr>
<tr>
<td>3</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>4</td>
<td>Grad Minor Elective 3-4 cr</td>
</tr>
<tr>
<td>5</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>6</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>7</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>8</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>9</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
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<td>10</td>
<td>CHE 525 CHE Analysis 4 cr</td>
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<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
<tr>
<td>12</td>
<td>CHE 525 CHE Analysis 4 cr</td>
</tr>
</tbody>
</table>

**Available CBEE Electives:**

- CHE 545
- CHE 544
- CHE 517
- CHE 611
- CHE 551
- CHE 550
- CHE 581
- CHE 581

**Notes:**

- CHE Core (21 cr): CHE 507, CHE 514, CHE 520, CHE 525, CHE 537, CHE 540
- CHE 507 Seminar is required for fall term, very strongly recommended for winter/spring terms.
- M.S. Thesis (9 cr): variable credits, thesis credits can go over 9 units total to meet GTA/GRA requirements
- Graduate Minor (15 cr): Any graduate-level course, typically 4-5 courses, These are your most flexible credits.
** Year 2: completion time is dependent upon intensity of project

** Slash course 443/543. Cannot be taken for graduate credit. Does not meet Graduate School stand-alone requirement.

** M.S. DEGREE CURRICULUM IN CHEMICAL ENGINEERING FOR CHEMISTRY UG MAJORS

(all non-chemical engineering majors use this curriculum in combination with advice from your research or academic advisor)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>CHE 507 Grad Seminar 1 cr</td>
<td>CHE 507 Grad Seminar 1 cr</td>
</tr>
<tr>
<td>CHE 331 UG Fluids 3 cr</td>
<td>CHE 312 UG Thermo 3 cr</td>
</tr>
<tr>
<td>CHE 443 UG Reaction Engineering* 4 cr</td>
<td>CHE 332 UG Transport II (Heat Trans) 4 cr</td>
</tr>
<tr>
<td>Grad Minor Elective 3-4 cr</td>
<td>CHE 514 Grad Fluid Flow 4 cr</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
</tr>
</tbody>
</table>

Available CBEE Electives

CHE 545
CHE 544
CHE 517
CHE 611
CHE 551
CHE 550
CHE 581
CHE 581

Note:
CHE Core (21 cr): CHE 507, CHE 514, CHE 520, CHE 525, CHE 537, CHE 540
CHE 507 Seminar is required for fall term, very strongly recommended for winter/spring terms.
M.S. Thesis (9 cr): variable credits, thesis credits can go over 9 units total to meet GTA/GRA requirements
Graduate Minor (15 cr): Any graduate-level course, typically 4–5 courses. These are your most flexible credits.
Prerequisites for Graduate Core (14 cr): CHE 312, CHE 331, CHE 332 (or CHE 333 offered Spring term), CHE 443
**Slash course 443/543. Cannot be taken for graduate credit. Does not meet Graduate School stand-alone requirement.**

**MS / MENG IN ENVIRONMENTAL ENGINEERING**

a. At a minimum, the student’s program shall contain the pre-requisite courses above (or be able to show equivalency);

b. These courses should be taken as soon as possible in preparation for the thesis. It is noted that not all courses shown below are offered every year.

c. The remainder of the student’s major program can be a compilation of any other 500 or 600 level classes as APPROVED by the major professor. Note that at least 20 credits must be graded graduate level CHE or ENVE courses.

**M.ENG. DEGREE CURRICULUM IN ENVIRONMENTAL ENGINEERING**

<table>
<thead>
<tr>
<th>Cr.</th>
<th>YEAR 1</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>CHE 525 CHE Analysis</td>
<td>ENVE 541 Microbial Proc in Env. Syst.</td>
<td>ENVE 535 Phys + Chem Proc for ENVE</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>4 credits</td>
<td>4 credits</td>
<td>4 credits</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4 credits</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>3-4 credits</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Grad Minor #1</td>
<td>Grad Minor #4</td>
<td>Grad Minor #5</td>
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<tr>
<td>8</td>
<td></td>
<td>3-4 credits</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>3-4 credits</td>
<td>3-4 credits</td>
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</tr>
<tr>
<td>11</td>
<td></td>
<td>Grad Minor #1</td>
<td>Grad Minor #4</td>
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<td>12</td>
<td></td>
<td>3-4 credits</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
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<tr>
<td>13</td>
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<td>Grad Minor #2</td>
<td>Grad Minor #5</td>
<td>Grad Minor #5</td>
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<tr>
<td>14</td>
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<td>3-4 credits</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>CHE 507 Seminar</td>
<td>CHE 507 Seminar</td>
<td>CHE 507 Seminar</td>
</tr>
<tr>
<td>16</td>
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<td>3 credits</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>13-17</td>
<td>14-17</td>
<td>8-15</td>
</tr>
</tbody>
</table>

**Notes:**

- Graduate ENVE Core, 20 credits: CHE 507(3x1), CHE 525(4), ENVE 532(4), ENVE 536(1), ENVE 535(4), ENVE 541(4) [Seminar (CHE 507) is required for all terms]
- General Engineering, 10 credits: Take 1 of ENVE 525, ENVE 556 and ENVE 531. (Depending upon progress, these courses could be distributed into Year 2).
Graduate Minor: 15+ credits, typically 4-5 courses. (Depending upon progress, these courses could be distributed into Year 2).

Total Graduate Credits: 45+
Coursework Credits: 45 minimum (20 Graduate ENVE Core and 15 Graduate Minor, 10 general engineering).

M.S. DEGREE CURRICULUM IN ENVIRONMENTAL ENGINEERING

<table>
<thead>
<tr>
<th>Cr.</th>
<th>YEAR 1</th>
<th></th>
<th>YEAR 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td>Fall</td>
</tr>
<tr>
<td>1</td>
<td>CHE 525</td>
<td>ENVE 541</td>
<td>ENVE 535</td>
<td>ENVE 503</td>
</tr>
<tr>
<td></td>
<td>CHE Analysis</td>
<td>Microbial Proc in Env. Syst.</td>
<td>M.S. Thesis</td>
<td>M.S. Thesis</td>
</tr>
<tr>
<td></td>
<td>4 credits</td>
<td>4 credits</td>
<td>Variable credit</td>
<td>Variable credit</td>
</tr>
<tr>
<td>2</td>
<td>ENVE 532</td>
<td>Grad Minor #2</td>
<td>Grad Minor #4</td>
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</tr>
<tr>
<td></td>
<td>Aqueous Chem.</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4 credits</td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>ENVE 536</td>
<td>Grad Minor #3</td>
<td>Grad Minor #5</td>
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</tr>
<tr>
<td></td>
<td>Aq. Chem. Lab 1 credit</td>
<td>3-4 credits</td>
<td>3-4 credits</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Grad Minor #1</td>
<td></td>
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<tr>
<td>6</td>
<td>3-4 credits</td>
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<td>CHE 507</td>
<td>CHE 507</td>
<td>CHE 507</td>
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</tr>
<tr>
<td></td>
<td>Seminar</td>
<td>Seminar</td>
<td>Seminar</td>
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<tr>
<td>10</td>
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<td></td>
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<tr>
<td></td>
<td>Total 13-14</td>
<td>12+</td>
<td>12+</td>
<td>12</td>
</tr>
</tbody>
</table>

Notes:
- Graduate ENVE Core, 20 credits: CHE 507(3x1), CHE 525(4), ENVE 532(4), ENVE 536(1), ENVE 535(4), ENVE 541(4)
- Seminar (CHE 507) is required for all three terms in the first year (if possible)
- M.S. Thesis, 9+ credits: only 9 thesis credits are counted toward degree requirements; however, thesis credits can exceed 9 units total to meet graduate assistantship requirements (e.g. 12 credits per term)
- Graduate Minor: 15+ credits, typically 4-5 courses. Depending upon the demands of your research assistantship, these course can be distributed into Year 2

Total Graduate Credits: 45+
Coursework Credits: 36 minimum (21 Graduate Major and 15 Graduate Minor)
M.S. Thesis Credits: 9
PROCEDURES LEADING TO A MASTER’S DEGREE

Below is an outline of the steps required to obtain the Master’s degree. You should become familiar with the specific and detailed information contained in the Graduate School Catalog, as well as School requirements. Final oral exams must take place before the 1st day of the following term in order to be considered for the current term (late exams will require registration for 3 credits in the following term if not completed). See also the Master’s Degree Flowchart from the OSU Graduate School:

http://gradschool.oregonstate.edu/sites/default/files/flowchart-masters.pdf

<table>
<thead>
<tr>
<th>Check Box</th>
<th>Item #</th>
<th>Step</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Choose a major professor and a general thesis topic</td>
<td>By the end of your second term</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>File a Masters Program of Study form</td>
<td>Before completing 18 credit hours</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Read the Thesis Guide on the Grad School’s website</td>
<td>Prior to starting your thesis</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Notify your major professor of your intended graduation term</td>
<td>AT LEAST 1 term before your intended graduation term</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Compare Program form and transcripts for consistency</td>
<td>1 term before your intended graduation term</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>File Petition to Change Program form if needed.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Confirm submission of your approved Program of Study with Graduate School</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>File a Diploma Application</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>Generate Grad Council Rep (GCR) list and contact those people until you find someone willing to serve as your GCR</td>
<td>15 weeks prior to final oral examination</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>Appoint Masters Committee w/approval of your major professor</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>Complete final draft of your thesis and submit it to your major professor for review and approval</td>
<td>By the start of your last term</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>Decide on a day / time (2 hrs) with all Committee members (faculty &amp; Grad Council Rep)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>Reserve a room with CBEE Office Coordinator</td>
<td>AT LEAST 2 weeks prior to final oral examination</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>Pick up copies of final oral examination scoring guide from Graduate School</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>Fill out Exam Scheduling Form</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>Submit thesis pretext pages to the Graduate School</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>Submit a final draft of the thesis to all committee members (with advisor’s approval)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>18</td>
<td>Confirm final oral examination appointment with the Grad School (make sure it’s on their calendar!)</td>
<td>1 week after submitting exam scheduling form</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>Post fliers of your defense (day, time, room, topic,</td>
<td>AT LEAST 1 week prior to final oral</td>
</tr>
<tr>
<td>Item</td>
<td>Step</td>
<td>Timing</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Choose a major professor (by default it is the Grad Program Chair unless otherwise selected)</td>
<td>By the end of your second term</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>File a Masters Program of Study form</td>
<td>Before completing 18 credit hours</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Notify your major professor of your intended graduation term</td>
<td>AT LEAST 1 term before your intended graduation term</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Start selection process to find two additional committee members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Compare Program form and transcripts for consistency</td>
<td>1 term before your intended graduation term</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>File Petition to Change Program form if needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Confirm submission of your approved Program of Study with Graduate School</td>
<td>15 weeks prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>File a Diploma Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Appoint Masters Committee w/approval of your major professor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Decide on a day / time (2 hrs) with all Committee members</td>
<td>AT LEAST 2 weeks prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Reserve a room with CBEE Office Coordinator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pick up copies of final oral examination scoring guide from Graduate School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Fill out Exam Scheduling Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Confirm final oral examination appointment with the Grad School (make sure it’s on their calendar!)</td>
<td>1 week after submitting exam scheduling form</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Remind (e-mail) Committee of the final oral examination</td>
<td>2 days prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Final oral examination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROCEDURES FOR MENG**
CHE DOCTORAL DEGREE PROGRAM

The School of Chemical, Biological and Environmental Engineering offers a doctoral degree program in Chemical Engineering (CHE).

COURSE OF STUDY
The university requirements for the doctorate include the following:
1. at least 108 graduate credits beyond the bachelor’s degree;
2. at least 50% of the course work must be graduate stand-alone courses;
3. a presentation of an original dissertation for which a minimum of 36 credit hours of dissertation research (thesis course) has been accumulated;
4. a minimum of one year of residence, continuously, at OSU (i.e., three consecutive quarters as a full-time student);
5. passing a preliminary oral examination in the major subject; and
6. successfully defending the dissertation in an oral presentation to a panel of experts.

For other regulations, see the OSU Graduate School Catalog.

1. In addition, school requirements include:
   a. passing a written and oral qualifying examination for candidacy (this examination is administered by the CBEE department, and is distinct from the “oral” preliminary examination required by the Graduate School);
   b. on assignment from the student’s doctoral committee, taking and passing (B average or higher) such courses as judged desirable by the doctoral committee for satisfactory progress in doctoral research;
      a. A Ph.D. degree student without an OSU M.S. degree in Chemical engineering must take the following five CHE core courses:
         i. CHE 514 (4) Fluid Flow
         ii. CHE 520 (4) Mass Transfer
         iii. CHE 525 (4) Chemical Engineering Analysis
         iv. CHE 537 (4) Thermodynamics I
         v. CHE 540 (4) Chemical Reactors I
   c. preparation and presentation of a written dissertation proposal - this paper will include a thorough literature review, outline of the proposed research project, and a description of the importance of the research with a perspective on the current state of the area of specialty.

2. As noted above, the student’s principal direction in the course of study comes from the doctoral committee, in which the major professor has final approval. The CBEE School members on the doctoral committee will generally expect:
   a. research credit in excess of 36 hours; and
   b. total course work credit of 72 hours or more, not including research. The minimum Graduate School requirement is a total of 108 hours, including research.

These, however, are guidelines and the doctoral committee can change them at its discretion.
DOCTORAL COMMITTEES

1. The principal authority over a student’s program resides with the student’s Doctoral Committee. This committee is responsible for:
   • assuring that University and School requirements are satisfied;
   • monitoring student progress;
   • assigning and approving courses of study;
   • approving dissertation topics and paths-forward; and
   • administering preliminary and final oral examinations.

2. The committee consists of at least 5 members:
   • the student’s major professor;
   • two other CBEE faculty members;
   • the student’s minor professor, or if no minor is selected, committee member may be from graduate faculty at-large and
   • one Graduate Council Representative.

Note that the composition of a student’s Doctoral Committee MUST be approved by the major professor.

3. The committee is originally formed, with approval from the major professor, at the student’s invitation. The Graduate Council Representative (GCR) is selected from a list provided by the Graduate School. The Graduate Council Representative is a permanent member of the committee and must attend all committee meetings, including the preliminary program committee meeting, the oral preliminary exam, and the final examination (dissertation defense). Information on the GCR can be found at:

   [http://oregonstate.edu/dept/grad_school/degreecommittee.php#council](http://oregonstate.edu/dept/grad_school/degreecommittee.php#council)

4. The Committee should be appointed after successful completion of the qualifying exam.

MATRICULATION / CANDIDACY

1. Matriculation (first term of attendance) qualifies the student to:
   a. select a general area of dissertation research;
   b. identify a major professor

2. After matriculation, the student must pass a written qualifying examination (described below). This examination must be taken before the end of the first 18 months as a PhD student.

WRITTEN QUALIFYING EXAMINATIONS FOR DOCTORAL STUDENTS

The qualifying examination process in the PhD program in the School of Chemical, Biological and Environmental Engineering is intended to evaluate a student’s ability to independently conceive original research topics, carry out and present a literature survey on the topic, critically consider the proposed research topic for hypothesis driven key research tasks, and propose approaches to
the implementation of these research tasks. One member of the graduate committee will be responsible for administering (developing the problem statements, selecting the committees, communicating with students, and scheduling) the qualifying exams. Examinations will be scored by at least two faculty members.

A written exam ("the qualifier") is required of all Chemical Engineering Ph.D. students. Upon passing the exam, the student is categorized as a Ph.D. "candidate." An overall grade of 80% is required to pass the exam. This exam is sometimes referred to as a "prelim", but it is distinct from the Preliminary Oral Examination required by the Graduate School.

The qualifying examination is offered once each year in Fall. Additional or alternate examination periods may be scheduled at the discretion of the School Graduate Committee Chair.

The examination will be supervised and evaluated by an examination committee chosen from the School Graduate Faculty members. The Chair of the School Graduate Committee will chair the examination committee. If the Graduate Committee Chair has one of his/her students sitting for the qualifier, an alternate will be named to chair the exam committee.

All students entering the CHE doctoral program are required to take the qualifying examination within 18 months of matriculation as a PhD student. Typically, those students entering without a Master’s degree in Chemical Engineering, Bioengineering or Environmental Engineering from OSU will take the examination in Fall term of their second year. Students continuing for the Ph.D. after receiving a Master’s degree in Chemical Engineering or Environmental Engineering at OSU generally will take the qualifying exam the next time it is offered after completion of their master’s final examination and thesis.

The exam problem for each student will be developed by the graduate committee in consultation with the student’s advisor. The problem will be on a general topic that is of interest to the advisor’s research program, but not directly in the student’s area of research. In this way, the effort that students expend in the exam may benefit CBEE research programs and their own breadth in their research area. The advisor will provide a sentence describing the students’ specific research topic such that the graduate committee can ensure that the exam is not directly in the student’s research area. Students are expected to complete the examination without assistance from their major professor, other students or faculty, etc.

The student passes the qualifying exam with a total score of at least 80%. A student earning a total score of 80% or above, shall stand for an oral examination by a committee of three faculty, appointed by the Chair of the examination committee. This oral examination shall take place within four weeks following student notification of any deficiency. Following this oral examination, the three-member committee will report the results to the examination committee where a decision will be made as to whether or not the student has passed the qualifier.

Prospective doctoral candidates failing the qualifying exam may retake the test the next time it is offered, and then only with the following privileges and exceptions. The student may retake the exam only once.

Prospective doctoral candidates whose total grade falls below 60% on their first examination, may be dismissed from the program, or may at the discretion of the School Graduate Committee, be given the opportunity to retake the entire exam.
**PRELIMINARY ORAL EXAMINATION**

Ph.D. candidates will present their proposed dissertation research to their committee as part of their preliminary exam. This formal seminar should be given within six months of passing the school qualifying examination and is to be a presentation of their planned research and a review of the literature supporting this plan.

As a means for giving the student’s committee an early chance to help direct the doctoral research, the preliminary examination will consist of discussions concerning the student’s research direction with a 30 minute (or amount of time determined by the major professor) presentation by the student on his/her proposed research. The discussion is meant to identify strengths and weaknesses within the student’s preparation and proposal. It is intended to be a constructive critique of the progress achieved to date, as well as to provide focus for the student’s research. The oral preliminary examination will be scheduled for a minimum of two hours.

The remaining portion of the examination will focus on the student’s basic understanding of Chemical Engineering or Environmental Engineering (as covered in the qualifying examination) and the minor area(s), as well as all of the courses that the student has taken at OSU.

Students should begin preparing for and complete the oral preliminary exam within six months after having passed the qualifying exam. At least one complete academic term must elapse between the time of the preliminary oral examination and the final oral examination. If more than five years elapse between these two examinations, the candidate will be required to take another preliminary oral examination.

**DOCTORAL DISSERTATION**

All Ph.D. candidates must submit a thesis embodying the results of research and presenting evidence of originality and ability in independent investigation. The thesis must constitute a valid contribution to knowledge in the field of study, and must be based on the candidate’s own investigation, including one or more of the following elements:

- Contribution to theory
- Development of new method for scientific investigation
- Generation of new scientific data which clearly contribute to the development of sciences
- Development and/or novel implementation of a numerical model

The thesis must reflect a mastery of the literature of the subject and be written in scientific format.

Regulations concerning the doctoral thesis are the same as those for the master’s degree with the following exceptions:

1. An examination copy of the thesis must be presented to the Graduate School (and the doctoral committee members) **at least two weeks prior** to the final oral examination:
2. Within **six weeks** of the final oral examination, two final copies of the thesis must be submitted to the OSU library and one extra copy of the abstract and title page must be deposited unbound with the Graduate School.
A formal thesis guide containing full requirements is available on the Graduate School website: http://oregonstate.edu/dept/grad_school/thesis.php

FINAL ORAL EXAMINATIONS

After completion of or while concurrently registered for all work required by the program, the student must pass a final oral examination. The final oral examination must be scheduled in the Graduate School not less than two weeks prior to the date of the examination. The final oral examination must be announced, in writing, to all faculty and students in the School of Chemical, Biological and Environmental Engineering not less than two weeks prior to the examination date.

The thesis defense portion of the final oral examination is open to all interested persons. After the open portion of the exam, the examining committee excludes all other persons and continues with the examination of the candidate’s knowledge of his or her field and the evaluation of the candidate’s performance. The oral final examination should be scheduled for at least two hours.

The student is expected to display a mastery of knowledge in his/her field and professional maturity as a Chemical or Environmental Engineer. In the oral examination, the candidate is expected to defend the thesis and show a satisfactory knowledge of his or her field. If more than one negative vote is recorded by the examining committee, the candidate has failed the examination. Only one re-examination is permitted.

The final oral examination must be taken within five years after the oral preliminary examination. If more than five years elapse, the candidate is required to take another oral preliminary examination.

ENVE DOCTORAL PROGRAM

The School of Chemical, Biological and Environmental Engineering offers Doctoral Degrees in the Environmental Engineering (ENVE)

COURSE OF STUDY

The university requirements for the doctorate include the following:

• at least 108 graduate credits beyond the bachelor’s degree;
• at least 50% of the course work must be graduate stand-alone courses;
• a presentation of an original dissertation for which a minimum of 36 credit hours of dissertation research (thesis course) has been accumulated;
• a minimum of one year of residence, continuously, at OSU (i.e., three consecutive quarters as a full-time student);
• passing a preliminary oral examination in the major subject; and
• successfully defending the dissertation in an oral presentation to a panel of experts.

For other regulations, see the OSU Graduate School Catalog.
In addition, school requirements include:

- passing an oral qualifying examination for candidacy (this examination is administered by the ENVE faculty, and is distinct from the “oral” preliminary examination required by the Graduate School);

- A minimum of one full-time academic year of regular non-blanket course work (at least 36 credits) must be included on the doctoral program

- No more than 15 credits of blanket-numbered courses, other than thesis, may be included in the minimum 108-credit program

**Coursework completed as part of a Master’s degree (M.S. or M.Eng.) can be transferred for credit towards the doctoral degree with the consent of the student’s doctoral committee.

A Ph.D. degree student without an OSU M.S. degree in Environmental Engineering must take the following six ENVE core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 525</td>
<td>4</td>
<td>Chemical Engineering Analysis</td>
</tr>
<tr>
<td>ENVE 532</td>
<td>4</td>
<td>Aquatic Chemistry: Natural and Engineered Systems</td>
</tr>
<tr>
<td>ENVE 535</td>
<td>4</td>
<td>Physical and Chemical Processes for Hazardous Waste Treatment</td>
</tr>
<tr>
<td>ENVE 536</td>
<td>1</td>
<td>Aqueous Environmental Chemistry Laboratory</td>
</tr>
<tr>
<td>ENVE 541</td>
<td>4</td>
<td>Microbial Processes in Environmental Systems</td>
</tr>
<tr>
<td>CHE 507</td>
<td>3</td>
<td>Seminar (1 credit each term, F,W,Sp)</td>
</tr>
</tbody>
</table>

A Ph.D. candidate without a B.S. degree in Environmental Engineering (or equivalent Engineering degree) must take the courses listed in the Prerequisite section of the manual in addition to the ENVE core.

There are five steps to be completed towards a Ph.D. degree:

1. Approval of graduate study program
2. Oral qualifying examination
3. Preliminary examination
4. Final oral examination
5. Thesis submission

**DOCTORAL COMMITTEES**

1. The principal authority over a student’s program resides with the student’s Doctoral Committee. This committee is responsible for:
   - assuring that University and School requirements are satisfied;
   - monitoring student progress;
   - assigning and approving courses of study;
   - approving dissertation topics and paths-forward; and
   - administering preliminary and final oral examinations.

2. The examination committee is nominated by the student’s advisor, subject to the approval of the CBEE School Head and the Graduate School. The doctoral committee will consist of a minimum of five members of the graduate faculty, including the Major Professor and one additional Environmental Engineering faculty member, one faculty from each declared
minor field, and a Graduate Council Representative. **It is the student’s responsibility** to obtain his or her own Graduate Council Representative from a list provided by the Graduate School. The doctoral committee will review and approve the student’s program of study for the Ph.D. degree and participate in all formal committee meetings and student examinations required for the Ph.D. degree, including the preliminary and final exams.

3. The Graduate Council Representative (GCR) is selected from a list provided by the Graduate School. The Graduate Council Representative is a permanent member of the committee and **must** attend all committee meetings, including the preliminary program committee meeting, the oral preliminary exam, and the final examination (dissertation defense). Information on the GCR can be found at: [http://oregonstate.edu/dept/grad_school/degreecommittee.php#council](http://oregonstate.edu/dept/grad_school/degreecommittee.php#council)

4. The Committee should be appointed after successful completion of the qualifying exam.

**MATRICULATION / CANDIDACY**

1. Matriculation (first term of attendance) qualifies the student to:
   a. select a general area of dissertation research;
   b. identify a major professor

2. After matriculation, the student must pass a written qualifying examination (described below). This examination must be taken before the end of the first 18 months as a PhD student.

**ORAL QUALIFYING EXAMINATION**

An Oral Qualifying Examination is required of all Ph.D. candidates prior to the Preliminary Exam. The purpose of the exam is to ensure that each Ph.D. candidate has a mastery of basic Environmental Engineering subjects. The Oral Qualifying Exam is a CBEE School requirement and should be taken upon completion of the core Environmental Engineering coursework. A committee consisting of a minimum of 3 Environmental Engineering graduate faculty members, including the Environmental Graduate Committee Chair, will administer the examination.

The exam should be scheduled for two hours and will consist of an oral examination of the candidate’s breadth of understanding of fundamental Environmental Engineering knowledge. One dissenting vote is permitted, but **no re-examination is permitted**. Failure to pass the qualifying exam will result in termination of the student’s Ph.D. candidacy. In appropriate cases, students may choose to complete a M.Eng. degree upon termination of their Ph.D. candidacy. At the discretion of the student’s committee, the requirement of the Oral Qualifying Exam can be met by the successful defense of a M.S. Thesis in Environmental Engineering at OSU (i.e., passing the M.S. Final Examination).

**PRELIMINARY EXAMINATIONS FOR DOCTORAL STUDENTS**

There are two components to preliminary examinations completed as part of a Ph.D. degree in Environmental Engineering: (1) the Written Preliminary Examination, and (2) the Oral Preliminary Examination.
The written preliminary exam followed by an oral defense is intended to evaluate a Ph.D. student’s ability to utilize scientific literature, to think critically, to write creatively, to articulate ideas, and to demonstrate understanding of his/her specific field of study. The Preliminary Examination will consist of both written and oral parts. The oral part of this examination will also evaluate the student’s breadth of knowledge in areas of broader focus, yet related to the area of research. Generally, the oral part of the exam will begin with an approximately 45 minute presentation by the student, in which he/she presents her research, and thus, the content of the written report. This will be followed by a question and answer session in which the committee can address both the research itself and also more general knowledge. Preliminary exams should be scheduled for at least two hours.

WRITTEN PRELIMINARY EXAMINATION

The Written Preliminary Exam must be completed prior to the Oral Preliminary Exam. Candidates must write a proposal on their thesis topic and distribute it to their doctoral committee members at least one week prior to the date of the Oral Preliminary Exam.

Guidelines for the Written Research Proposal
This examination will also test the student’s ability to develop, investigate, and defend their original research idea. The originality, scholarly quality, and the technical feasibility of the research proposal will be evaluated.

The format of the written research proposal required for the Preliminary Exam is as follows.
1. The report is intended to contain a summary of the student’s research, to demonstrate knowledge in the area of research, progress so far, expected results, and a timeline for completing the research and thus to graduation.
2. This ‘report’ style document should contain an introduction, literature review, outline of major hypotheses, discussion of methods that will be used to test the hypotheses, preliminary findings up to the point of the exam, a summary, and a timeline indicating roughly when key elements of the research will be completed. Such a report would likely serve as a basis for the first several chapters of the Ph.D. candidate’s dissertation.
3. The written research proposal is limited to fifteen single-spaced pages (including references, timeline, etc.)
4. The written research proposal must be written by the Ph.D. candidate with limited input from the thesis advisor.

ORAL PRELIMINARY EXAMINATION

The Oral Preliminary Examination is conducted by the student’s doctoral committee and should cover the student’s knowledge in his/her major and minor subjects. The examination consists of an oral defense of the proposal submitted in the Written Preliminary Examination on the candidate’s proposed research topic. However, no more than one-half of the time should be devoted to specific aspects of the thesis project. The first part of the examination (i.e., the presentation and defense of the student’s thesis proposal) is generally presented as a seminar to the student’s doctoral committee. This portion should last no longer than 30 to 45 minutes. The
committee will then ask questions relating to the thesis proposal, the candidate’s course work, or the student’s research. All members of the doctoral committee, including the GCR, are expected and encouraged to participate in examining the student. No committee member should be allowed to monopolize the examination, and the student must be given an adequate and fair opportunity to respond to the questions.

The examination will be scheduled for at least two hours, and the examination date must be scheduled with the Graduate School at least one week in advance.

If more than one negative vote is recorded by the examining committee, the candidate will have failed the oral examination. Only one re-examination is permitted.

At least one complete academic term must elapse between the time of the Oral Preliminary Examination and the Final Oral Examination. If more than five years elapse between these two examinations, the candidate must take another Oral Preliminary Examination.

DOCTORAL DISSERTATION

All Ph.D. candidates must submit a thesis embodying the results of research and presenting evidence of originality and ability in independent investigation. The thesis must constitute a valid contribution to knowledge in the field of study, and must be based on the candidate’s own investigation, including one or more of the following elements:

- Contribution to theory
- Development of new method for scientific investigation
- Generation of new scientific data which clearly contribute to the development of sciences
- Development and/or novel implementation of a numerical model

The thesis must reflect a mastery of the literature of the subject and be written in scientific format.

Regulations concerning the doctoral thesis are the same as those for the master’s degree with the following exceptions:

3. An examination copy of the thesis must be presented to the Graduate School (and the doctoral committee members) at least two weeks prior to the final oral examination.
4. Within six weeks of the final oral examination, two final copies of the thesis must be submitted to the OSU library and one extra copy of the abstract and title page must be deposited unbound with the Graduate School.

A formal thesis guide containing full requirements is available on the Graduate School website: http://oregonstate.edu/dept/grad_school/thesis.php

FINAL ORAL EXAMINATIONS

After completion of or while concurrently registered for all work required by the program, the student must pass a final oral examination. The final oral examination must be scheduled with the Graduate School not less than two weeks prior to the date of the examination. The final oral examination must be announced in the School of Chemical, Biological, and Environmental
The final oral examination must be taken within five years after the oral preliminary examination. If more than five years elapse, the candidate is required to take another oral preliminary examination.

**RE-EXAMINATION**

The candidate is expected to defend their thesis during the final oral exam and show a satisfactory knowledge of his or her field. If more than one negative vote is recorded by the examining committee, the candidate has failed the examination. **Only one re-examination is permitted.**

**PROCEDURES LEADING TO THE DOCTORAL DEGREE**

Below is a brief list of the steps required to obtain the Ph.D. degree. You should also become familiar with the specific and detailed information contained in the Graduate School Catalog as well as School requirements.

<table>
<thead>
<tr>
<th>Check Box</th>
<th>Item #</th>
<th>Step</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Identify a Major Professor</td>
<td>During first term</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Establish general area of dissertation research</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Generate <a href="#">Grad Council Rep (GCR) list</a> and contact those people until you find someone willing to serve as your GCR</td>
<td>Before Completing 2 terms (if you already have a master’s degree) or 5 terms (if you do not)</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Schedule doctoral program meeting with all committee members; reserve a room w/CBEE Office Coordinator</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Doctoral program meeting</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>File <a href="#">Doctoral Program of Study</a></td>
<td>Upon completion of core coursework</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Take Oral Qualifying Exam</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Prepare and submit Written Preliminary Exam to doctoral committee members</td>
<td>AT LEAST 1 week prior to the date of the Oral Preliminary Exam</td>
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<tr>
<td></td>
<td>Task Description</td>
<td>Deadline/Relevance</td>
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<tr>
<td>8</td>
<td>Schedule the Preliminary Oral Examination w/your committee (45 minutes)</td>
<td>AT LEAST 2 weeks prior to preliminary oral examination</td>
<td></td>
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<tr>
<td>9</td>
<td>Reserve a room in CBEE w/the Office Coordinator for the Preliminary Oral Examination</td>
<td></td>
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<tr>
<td>10</td>
<td>Pick up copies of Preliminary Oral Examination scoring guide from Graduate School</td>
<td></td>
<td></td>
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<tr>
<td>11</td>
<td>Fill out Exam Scheduling Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Preliminary oral examination</td>
<td>NO LATER THAN 1 complete term prior to planned final defense date</td>
<td></td>
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<tr>
<td>13</td>
<td>Hold regular meetings with your Committee to keep them updated on your progress</td>
<td>Throughout your degree progression (at least once a year)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Read the Thesis Guide on the <a href="#">Grad School’s website</a></td>
<td>Prior to starting your dissertation</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Compare Doctoral Program of Study form and transcripts for consistency</td>
<td>1 term before your intended graduation term</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>File Petition to Change Program form if needed.</td>
<td>15 weeks prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>File a Diploma Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Complete final draft of your dissertation and submit it to your major professor for review and approval</td>
<td>By the start of your last term</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Schedule the final oral examination w/your committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Reserve a room with CBEE Office Coordinator</td>
<td>AT LEAST 2 weeks prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Pick up copies of final oral examination scoring guide from Graduate School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Fill out Exam Scheduling Form</td>
<td></td>
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<tr>
<td>23</td>
<td>Submit thesis pretext pages to the Graduate School</td>
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<tr>
<td>24</td>
<td>Submit a final draft dissertation to all committee members (with advisor’s approval)</td>
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<td></td>
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<tr>
<td>25</td>
<td>Confirm final oral examination appointment with the Grad School (make sure it’s on their calendar!)</td>
<td>1 week after submitting exam scheduling form</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Post fliers of your defense (day, time, room, topic, your name, etc.) in student and faculty mailboxes</td>
<td>AT LEAST 1 week prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Remind (e-mail) Committee of the final oral examination</td>
<td>2 days prior to final oral examination</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Final oral examination</td>
<td>NO EARLIER THAN 1 term after passing preliminary oral examination</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Complete thesis revisions, have major professor approve &amp; sign final version, and print copies for binding using following <a href="#">Grad School Thesis Guidelines</a></td>
<td>Within 6 weeks of the exam or by the first day of the Next term, whichever is first; if you miss the deadline, you will be required to register for an additional 3 credits, no exceptions!</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Submit final copies (See <a href="#">Submission Instructions</a>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Complete <a href="#">Graduate School Exit Survey</a></td>
<td>Print certificate and take to Grad School in exchange for a gift!</td>
<td></td>
</tr>
</tbody>
</table>
NOTES ABOUT THE CHECKSHEET

The Doctoral Program of Study form is located on the Graduate School’s website. You should work with your advisor to fill out the Program of Study form before you hold your doctoral program meeting, because your committee needs to approve the Program of Study before you can submit it to the Graduate School.

The Written Qualifying exam is offered only in the Fall term. Students who need to take the exam will be notified of the exam dates near the beginning of the Fall term. Upon passing the exam, the student becomes a PhD “Candidate.”

For various reasons, changes often occur in the classes you plan to take and what you actually end up taking to earn your degree. When you graduate, the Program of Study must be 100% accurate. You should compare the program on file with your transcripts, which can be viewed by logging into Student Online Services. Make corrections by filling out the Petition to Change the Program of Study form at least one term before you plan to defend. You do not have to fill it out each time you deviate from your original program; however, you need to keep your committee informed of any and all changes since they are the ones who must approve your Program.

Give yourself and your committee members a lot of time to plan for the defense date. Sometimes committee members will be on sabbatical leave during the term in which you plan to defend. You should check with your committee members about such leaves far in advance to better plan, especially if you need to change a committee member for any reason. Note that your GCR must attend all meetings and examinations during your degree program.

The Diploma Application must be filed no later than week two of the term in which you defend. However, it is okay to fill out the form a term or two early. If you need to change your end term after you file a Diploma Application, simply fill out the application again.

When you confirm your defense exam date with the Graduate School, you are making sure your exam is on their calendar. If they are not aware of your defense date, even if you filled out all the paperwork, you will not be allowed to defend and will have to reschedule.

The Graduate School has a Thesis Guide on their website, which explains the specific criteria for library copies of the dissertation. Students are encouraged to review the site, listed below, before starting to write the thesis to ensure understanding of the formatting, procedures, and deadlines. You must follow these guidelines closely, or risk having your printed thesis rejected by the Graduate School. More information on the thesis requirements is available at:

http://oregonstate.edu/dept/grad_school/thesis.php

THESIS BINDING

The school requires one copy of each thesis be provided to the Main Office prior to departure. The School will take care of binding the copy provided to us. If your advisor would like a bound copy, an unbound copy may be provided to the Main Office at the same time and we facilitate the binding. In this case, you must provide the index number the faculty member wishes to charge the binding services to. Students wishing to bind a personal copy are welcome to do so at the same time. A personal check made out to the following binding service must be provided at the time the
thesis copies are turned in to the Main Office. Checks should be made payable to:

Cyrano’s
361 SW 2nd Street
Corvallis, OR 97333

Phone: 541-752-0469
Website: www.stpcyranos.com
E-mail: stpcyrano@hotmail.com