

## Civil & Environmental Engineering Graduate Resource Guide

2019-2020

## WELCOME!

Welcome to the department of Civil and Environmental Engineering. We have developed this Resource Guide to help you learn about the University of Michigan community and the wide variety of services and organizations that are available to you as a UM graduate student.

We hope the information in this guide will help you make the most of your time at Michigan and we also encourage you to contact department faculty and staff with any questions you may have.

## Getting to, from, and around Ann Arbor

Maps and a UM I Phone App to help you navigate campus

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Financial Aid contacts and department resources

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Student employment resources, information for current employees and campus Career Services information

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Useful UM acronyms, information on student organizations and resources, where to find help with IT and facilities questions

## GETTING TO, FROM AND AROUND ANN ARBOR

Check out the Campus Information Center website at <u>CIC Maps & Directions</u> for directions, links to transportation resources and a guide to visiting Ann Arbor. You can also download the free <u>Free Campus Life and UM Information App</u> which can help you navigate campus.

## **ARRIVAL CHECKLIST**

As you prepare for your arrival in Ann Arbor, you may want to do any or all of the following:

## **Make Housing Arrangements**

If you are considering living on-campus, the <u>Northwood Community Townhouses and</u> <u>Apartments</u>, located on North Campus, offers housing for students with families and single graduate students. The Community also offers additional resources for families, such as child care and English classes for spouses, partners, and children. The <u>Off-Campus Housing website</u> allows you to search for apartments with landlords who have registered with UM.

## Find Parking & Transportation

Information on transportation and parking is available on the <u>Parking and Transportation</u> <u>Services</u> website. Your MCard gives you free access to the <u>Ann Arbor Transportation</u> <u>Authority's</u> services. Campus parking can be problematic, so many students who live near campus either walk or ride the AATA buses.

Free UM buses to main campus run approximately every 10 minutes. Schedules are available through this <u>link</u>. The nearest pick-up location to CEE is near the corner of Beal and Hayward.

## Establish a Bank Account

<u>UM has partnered with PNC Bank</u> to link your MCard with a checking account at PNC. Additionally, the <u>UM Credit Union</u> has six locations in Ann Arbor, including a branch in Pierpont Commons, on North Campus. There are also numerous area banks that can provide financial services.

## Arrange for Health Insurance Coverage

Students enrolled at U of M receive health insurance coverage from the <u>University Health</u> <u>System (UHS)</u> through tuition payments. UHS recommends that student purchase additional health insurance for fees, such as emergency care, that are not covered. <u>The Domestic</u> <u>Student Health Plan</u> provides one option for additional coverage.

Graduate Student Instructors and Graduate Student Research Assistants with appointments of 25% or more, and awardees of certain fellowships are eligible for health care coverage with <u>GradCare</u>, which is part of the university employees' health care plan.

If you are an International student, health insurance arrangements can be made through the <u>International Center</u>. All International students are required to have health insurance.

## **International Students**

Check in with the <u>International Center</u>. The International Center can assist you with the process of obtaining a Social Security Number; help you set an appointment to take English language proficiency examinations, TB screening and many other useful things. Certain entering international students must be screened for tuberculosis. Free screening is offered on campus. See <u>https://www.uhs.umich.edu/testing</u> for more information.

## **Contact Your Academic Advisor**

In the course of your academic program, other questions may arise. There are several sources of information to which you can turn for answers and advice concerning academic progress, or other academic issues. Each program area provides an academic advisor to counsel new students. Incoming students will be contacted by their advisor before the Department Welcome event. In addition, we offer incoming students the option of having a current graduate student serve as a mentor to help answer questions and familiarize them with the department and campus. This assignment is made prior to the Welcome event. Contacts for the areas within the <u>Civil & Environmental Engineering</u> department are listed below:

Department Phone: 734-764-8495 Email: gradservices@umich.edu Department Chair: Jerry Lynch

Our <u>Master's advising contacts</u> can be found on our website.

## Check out the Engineering Graduate programs website

This site contains a wealth of information on mentoring, professional development, and funding resources.

## Obtain a UM ID card

Regular students will not need a form to obtain their MCards. You will either receive your MCard at the College of Engineering orientation, or you can stop by any MCard station. Please see information here: <u>http://www.finance.umich.edu/treasury/mcard/get-your-mcard</u>

The North Campus station is located at B430 Pierpont Commons. Your UM ID gives you access to computer laboratories, recreational facilities and much more. For more information on MCard benefits go to <a href="http://www.mcard.umich.edu/overview.htm">http://www.mcard.umich.edu/overview.htm</a>

## **Computer Resources**

<u>ITS</u>

After you matriculated, you should have received an email or letter directing you to setup a <u>UM uniqname</u>. After your uniqname is established, standard UM computing services would have automatically been setup for you. Additional information on these services can be found on the <u>ITS website</u>.

## CAEN

As a member of the College of Engineering Community, you also have access to <u>CAEN</u> computing resources. Through student registration fees, CAEN provides unlimited use of its resources to all engineering students.

Finally, although you will have access to computing resources on campus, you may wish to purchase a computer for your private use. ITCS provides the UM Computer Sales Program, which makes computer hardware available to students at discounted prices. <u>The UM Computer Showcase</u> has much of this hardware on display in the basement of the Michigan Union, on Central Campus and on North Campus in the main concourse of Pierpont Commons. In addition, due to special licensing arrangements many standard software packages can be purchased from the University for substantially less than from commercial vendors.

## **Register for classes**

The University of Michigan's web-based class registration process <u>(Wolverine Access)</u> gives you the ability to search for the classes you want. For specific information on class registration procedures, check Wolverine Access Online Help.

To register for classes, you need a University uniqname and password. You will also need an appointment. You will receive an email notification for your appointment time on Wolverine Access; although newly admitted students to Rackham will not receive this and can begin registering June 3 at 8 a.m. EST.

## **Welcome Events and Orientation**

If you arrive at the beginning of the fall term, you may want to participate in campus-wide events that are designed to both orient students to the campus and answer general questions about programs and services. Welcome and orientation activities are sponsored by the <u>Rackham Graduate School</u> and the <u>College of Engineering</u> and take place just prior to the first day of classes. <u>The International Center</u> conducts additional orientation activities for international students. The <u>Rackham website</u> also contains additional information for new graduate students.

# Civil & Environmental Engineering has a separate departmental welcome the first week of September. New students are advised on an individual basis by their Faculty Advisor.

## Libraries

<u>University of Michigan libraries</u> contain 7.1 million volumes and nearly 70,000 current journals. Over 29 libraries are located at approximately 16 locations on and around campus. <u>The Art, Architecture and Engineering Library</u>, located in the Duderstadt Center, is one of the newest library facilities and is located on North Campus, conveniently close to engineering facilities.

## SECURING FINANCIAL ASSISTANCE

## **Financial Aid**

The <u>College of Engineering</u> makes every effort to ease financial barriers to students' academic progress. Much of the financial aid offered to graduate students may be in the form of an assistantship or a fellowship awarded through your department. Other sources of financial assistance, such as awards, grants, or loans may be pursued through the Rackham Graduate School or the <u>Office of Financial Aid</u>. Students having unusual financial situations may contact their Faculty Advisor, Graduate Committee Chair or the Department Chair. For more information, visit the <u>Rackham website</u>.

## **Financial Emergencies**

Even with an adequate financial aid package, sometimes emergencies necessitate seeking other assistance. Depending on the nature of the financial emergency, it is usually a good idea to begin by talking with someone in your department. The department may have resources to assist you during an emergency, or may be able to access other emergency funds within the College. Additionally, the <u>UM Credit Union</u> and area banks may be helpful.

## Budgeting

In addition to securing adequate financial aid, many students also must give attention to cutting expenses or developing a budget in order to manage their finances while in graduate school. The <u>Office of Financial Aid</u> provides confidential budget counseling for all enrolled students. To set up an appointment with a counselor, call (734) 763-6600. There are also several credit and debt counseling services in the community that may be able to assist you.

## Child Care/Elder Care

There are many services at the University and in the community that provide child care and elder care for dependents of enrolled students. One of the best ways to find a service that meets your particular needs is to contact the <u>University's Work/Life Resource Center</u>. The Center is a free finder service available to full-time and part-time UM faculty, staff and students.

## **EMPLOYMENT INFORMATION**

## **Current University Employees**

If you have a GSRA appointment with the University, **you will be required to certify your employment effort at the end of each term you worked.** Those required to certify will receive an email from the Cost Reimbursement Office asking them to complete the process. The email will provide detailed instructions to follow, requiring only a few minutes of your time. It is extremely important that you respond to this email. Certification of effort is a government mandated policy and failure to comply could result in a fine for the University.

## **Temporary Employment**

While it is not recommended that full-time graduate students seek employment in areas that are unrelated to their field of study, there are sometimes opportunities for temporary and part-time employment. Work Study jobs, as well as other part-time or temporary positions, are generally posted on the <u>Student Employment website</u>. Additionally, part-time or temporary positions may be posted through student e-mail groups.

Students who are hired by a faculty member as an hourly employee must complete the online employment application before employment paperwork can be processed. To complete the application, go to **"Wolverine Access"; "Student Business"; "Student Employment Application"** and follow the instructions. **Approval from your Faculty Advisor is required since your primary responsibility is to your education and research.** 

## **Career Services and Resources**

<u>The Engineering Career Resource Center</u> provides valuable free services to graduate students who are planning or undertaking the transition from graduate study to full-time employment. ECRC services include:

On-campus recruitment by employers

- Curriculum vitae or resume development assistance
- Workshops on topics including interviewing skills and salary negotiation
- An online job posting system exclusively for UM Engineering students
- Industry and employer profiles
- International student assistance

The Career Center, on Central campus, also offers services to all University of Michigan students.

<u>NCEES</u> develops, administers and scores the examination for used for engineering and surveying licensure in the United States leading to the Professional Engineering credential.

## GETTING HELP

The College of Engineering strives to be an environment in which students can meet their educational goals without compromising their sense of integrity or identity. However, in an organization as competitive and diverse as the College of Engineering, problems can arise. In the event of such problems, there are places to go for help.

## Academic Grievance

If there is justification to question the accuracy of an assigned grade, the student should first pursue the matter with the instructor. The responsibility for the assignment of grades is primarily that of the instructor and should be settled between the student and instructor whenever possible. Further pursuit of a grade grievance should be addressed with the instructor's Department Chair. The final appeal at the College level is by petition. Petitions may be obtained from the Engineering Academic Services Office, 1401 Lurie Engineering Center (LEC).

## **Other Academic Concerns**

If you experience other academic problems, such as difficulty with faculty advising, and are hesitant to seek recourse within the College of Engineering, there are services available in the Rackham Graduate School. The following persons can provide information and/or Assistance:

**Office of Conflict Resolution and Student Grievances** 

Rackham Graduate School Phone: (734) 936-1647

**Director of Recruitment and Graduate Student Engagement** Rackham Graduate School Phone: 734-615-3692

**CoE Graduate Student Liaison** 

Andria Rose Graduate Program Coordinator CoE Office of Student Affairs Phone: (734) 647-7028

## **Non-Academic Grievances**

**Problems with students**: <u>The Office of Student Conflict Resolution</u> addresses nonacademically related grievances that involve UM students. The scope of responsibility of the office is outlined in the <u>Statement of Student Rights and Responsibilities</u>. If you believe a student is in violation of the statement, you may contact the Office of Student Conflict Resolution to learn about resolution actions.

**Racial Discrimination and Harassment**: Contact <u>The Office of Student Conflict Resolution</u>, or contact the <u>Office of Institutional Equity</u>.

**Sexual Harassment**: The <u>SAPAC (Sexual Assault Prevention and Awareness Center)</u> provides educational programming on sexual assault, prevention, awareness, sexism, dating violence and the various issues related to these topics. The Center also provides counseling and crisis intervention services for survivors of sexual assault or sexual harassment and their friends and/or family members. Individual counseling is available in person as well as over the phone through the Center's counseling phone line: (734) 936-3333. Counselors are available to assist at the hospital or with the police or at campus offices on a 24-hour basis. The Center provides all services to any member of the University community: student, faculty and staff

In addition to the services provided by SAPAC, Sexual Harassment Complaint Receivers on North Campus include the following persons:

Debbie Taylor Assistant Director, Women in Science and Engineering Program 273 B Chrysler Phone: (734) 647-7014

Lyonel Milton Managing Director Center for Engineering Diversity & Outreach (CEDO) 1108 LEC Phone: (734) 647-7120

## General

<u>The Ombudsperson's Office</u> at the University is dedicated to assisting students with problems in any area of the University and cutting through bureaucratic red tape confidentially and promptly. The Ombudsman Office is committed to justice and fair treatment of all members of the University of Michigan community.

## **Emotional Problems, Stress, Family Conflict**

<u>The Counseling and Psychological Services (CAPS)</u> office at the University of Michigan has three areas of focus: clinical services, outreach and liaison, and training and professional development. Services to students include crisis intervention; brief personal counseling and short-term psychotherapy for individuals, couples and groups; consultation; and workshops on various informational and skill building topics. Consultation services are also available to University faculty and staff.

## **Legal Problems**

<u>Student Legal Services</u> assists students with various legal problems. The staff includes attorneys who advise on legal rights and will represent students in court if necessary. Representation is routinely provided for indebtedness, landlord/tenant issues, housing, divorce, probate, criminal defense misdemeanors/felonies, employment termination, and driver's license restoration. **Representation cannot be provided against another student or the University.** 

## **GRADUATE STUDY AT THE COLLEGE OF ENGINEERING**

Today, the College of Engineering at the University of Michigan is consistently ranked among the top engineering schools in the world. All of its undergraduate degree programs are ranked by *U.S. News & World Report* and nearly all of its graduate degree programs are rated in the top ten nationwide. The graduate Civil Engineering Programs is <u>currently ranked 7th</u> and the graduate Environmental Engineering Program is currently <u>ranked 3rd</u> in the nation.

## **Academic Programs**

The College of Engineering offers undergraduate and graduate programs through the doctoral level. The undergraduate program consists typically of a four-year schedule leading to a bachelor's degree. There are 14 courses of study that lead to the Bachelor of Science in Engineering degree (BSE) and one that leads to the Bachelor of Science degree (BS). By careful planning, an additional bachelor's degree (BS or AB) can be earned within the College of Engineering or in combination with another college within the University of Michigan in about one year beyond the time required for a single degree. Completion of both an engineering baccalaureate and a master's degree in approximately five years is also possible.

## Academic Progress

The time it takes to complete a particular program of study depends on factors such as the number of transfer credits, program options such as thesis or project, and the type of research being undertaken. However, there are some general time frames to which your own academic progress can be compared.

## **Average Time for Degree Levels**

The minimum time to complete the MSE requirements is one calendar year if no credits are being transferred from another program. A more common time to complete the Master's degree is three to four academic semesters. A minimum of 30 credit hours of approved graduate work must be completed for the MSE degree. Nine to twelve hours of credit per term is the usual full-time graduate course load. Graduate students with research or teaching appointments generally elect no more than six to nine credit hours per term.

Since the requirements to complete a PhD involve conducting independent research, it is more difficult to estimate a total time to complete this degree. However, a reasonable estimate is four years for a student entering the program with a Master's degree and five years entering with a BS degree. The milestones for completing the PhD degree include the following:

<u>Completing PhD coursework</u> - general requirements are 18 hours of coursework beyond the Master's degree, subject to approval by the Dissertation Committee. Generally this takes approximately three years for a student entering with a BS degree. Four credits of cognate courses (courses outside the CEE Department) and an advanced mathematics elective are required toward this total. Courses taken as a part of MS studies may be used to fulfill this

## requirement.

<u>Preliminary Examination</u> - The Pre-Candidate student must pass the Preliminary Examination to be considered for Candidacy. Prior to being considered for the Preliminary Examination, the Pre-Candidate student will have completed at least 18 credit hours beyond the Bachelor's degree (or 9 credits beyond an external Master's degree), have a cumulative GPA of 3.30 or better in graduate course work at the University of Michigan (excluding independent study courses), and have taken at least 3 credits of research or have served at least one term as a Graduate Student Research Assistant (GSRA). Students must also have a GPA of 3.5 or better in CEE courses. Eligibility to take the Preliminary Examination will then be determined by the Graduate Committee after critical review and evaluation of the student's academic performance submitted by the student's academic advisor.

The Preliminary Examination will ordinarily be taken as soon as the student is eligible and should be taken no later than 13 months for students entering with a Master's degree or 17 months for students entering with a Bachelor's degree after admission as a Pre-Candidate. A student may schedule his or her Preliminary Examination during either the first week of January or during the first two weeks of May. The student's advisor may request that the examination be taken at a different time, by submitting a petition to the graduate committee.

<u>Selection of Thesis Topic and Dissertation Committee Chair</u> - As soon as possible after passing the Preliminary Exam, the student should choose a thesis topic in consultation with the faculty member chosen by the student to serve as Chair of the Dissertation Committee. A faculty member with less than a 50% appointment in the Department of Civil and Environmental Engineering cannot serve as the sole Chair, but can serve as the Co-Chair provided that a faculty member with a greater than 50% appointment in Civil and Environmental Engineering is chosen as a Co-Chair. The student's dissertation research must make a significant and important contribution to knowledge in the chosen area of specialization. However, the scope and complexity of the research should not make completion impossible within a reasonable period of time.

<u>Selection and Appointment of Dissertation Committee</u> - The Dissertation Committee must include at least four members of the graduate faculty, including at least two from the Civil and Environmental Engineering Department and at least one from a cognate field outside the Department. A committee member may be appointed from qualified individuals not affiliated with the University of Michigan, but this person may not serve as the Cognate Committee Member. It is also necessary to file an application along with documentation describing the qualifications of any person who is not a member of the graduate faculty to obtain approval for this person to serve as a committee member. When the Dissertation Committee has been selected and each prospective member has consented to serve, the designated Committee Chair requests that the Department recommends appointment of the Dissertation Committee by the Dean of the Graduate School.

<u>Advancement to Candidacy</u> - After most of the course work has been completed, the Preliminary Examination has been passed, the Responsible Conduct of Research and Scholarship (RCRS) requirement has been met, and the Dissertation Committee has been formed, the student may be advanced to candidacy upon request of the advisor through a written memo to the Graduate Committee. Students and advisors should note that after reaching candidacy, students are allowed to take only one course per semester (unless the advisor commits additional funds beyond candidate tuition). Advancement to candidacy is granted by the Dean of the Graduate School upon recommendation of the Department Graduate Committee. The written recommendation must be received at the Graduate School in accordance with published deadlines for the term for which Candidacy is requested. The student should become familiar with Graduate School time deadlines for admittance to Candidacy. The Graduate School formally recognizes this milestone in the pursuit of the PhD.

<u>Final Program and Scope of Thesis Research</u> - Soon after the Dissertation Committee has been appointed, the Candidate should arrange for a Committee meeting to present the proposed remaining course work and thesis research program for Committee approval. The Dissertation Committee may establish requirements different from those specified earlier by the doctoral advisor. Having regular Committee meetings will avoid hardships resulting from deferring decisions on the final course program and research direction changes. It is recommended that these committee meetings be organized at least once a year and consist of a presentation by the student and a follow up discussion with the committee. Ideally, all committee members are present at these meetings.

<u>English Language Proficiency</u> - Every doctoral student must satisfy the departmental requirement of demonstrated proficiency in English writing before being advanced to candidacy. It is the responsibility of each Dissertation Committee to ensure that this requirement has been met. Certification by the Dissertation Committee Chair to the Graduate Committee that the Pre-Candidate has demonstrated proficiency in English writing will satisfy this requirement. Otherwise, this requirement must be fulfilled by the successful completion of one of the following courses:

- Technical Communications 610, Thesis, Dissertation Proposal, and Dissertation Writing for Engineers and Scientists, with a grade of "P",
- English Language Institute 620, Dissertation Writing and Writing for Publication I.

In the event that one of the above courses is used to satisfy the English proficiency requirement, the student must have taken the course previously or enroll in the course as soon as possible after advancement to Candidacy is achieved (Winter semester for January exam, Fall semester for May exam).

<u>Research Proposal Defense</u> - The Research Proposal Defense should occur no later than 30 months after enrolling in the PhD program. Students pursuing more than one degree are expected to take no longer than 36 months. The candidate prepares a written research proposal, which identifies the research problem, provides a preliminary literature review of past research related to the problem, describes the student's proposed approach to solve the problem, and includes any preliminary results that have been obtained. The research proposal must be submitted to the Dissertation Committee Chair no later than two weeks before the date of the Research Proposal Defense. If the proposal is not submitted by that date, the Research Proposal Defense may be postponed. The Research Proposal Defense will consist of a short oral presentation of the research proposal by the Candidate and an oral examination of the Candidate

by the Dissertation Committee. All members of the Civil and Environmental Engineering Faculty, advanced graduate students, and postdoctoral researchers may be invited to attend the Research Proposal Defense with permission of the Dissertation Chair. A copy of the research proposal will be filed in the Dissertation Committee Chair's files.

<u>Preparation and Submission of the Dissertation</u> - The dissertation must be prepared in a style acceptable to the Graduate School as given in its current <u>HANDBOOK FOR DOCTORAL</u> <u>CANDIDATES</u>. The several steps in the process of completion, submission and approval of the dissertation are specified in the HANDBOOK. The Dean of the Graduate School approves each dissertation.

<u>Final Oral Examination (Dissertation Defense)</u> - After completion of the dissertation, a final defense is scheduled in which the results of the dissertation research are presented to the Dissertation Committee. Final revisions to the dissertation are recommended by the dissertation committee and after format checks, the application for the degree is accepted by the Rackham Graduate School.

<u>Publication and Dissemination of the Thesis</u> - In addition to publishing the dissertation and making it available through Deep Blue, the Department expects that technical articles based on the dissertation research will be published in technical, peer reviewed journals, and that the work will be presented at professional meetings or conferences.

## Student Honor Code

<u>The Student Honor Code</u> was proposed by the engineering student body in 1915, and approved by the engineering faculty in 1916. It has been in effect since its inception, and is truly a distinguishing feature of enrollment at the College of Engineering. By observing the Code, students do their work in an environment of high standards of personal integrity and professional ethics.

As a basic feature of the Code, students are placed upon their honor during all examinations and written quizzes, and as required by the instructor, for computer assignments, homework, and laboratory reports. Although the instructor is available for questions, the examination may not be proctored. The student is asked to write and sign the following pledge at the end of the examination paper:

# "I have neither given nor received unauthorized aid on this examination, nor have I concealed any violations of the Honor Code."

Either a student or the instructor may report a suspected violation to the Honor Council Administrator located in Suite 273 Chrysler Center, 734-764-4139 or <u>honorcouncil-admin@umich.edu</u>.

## **Department Contacts**

## **Department Staff**

*Kelley Archer*, Graduate Coordinator (Room 2166 GGB) krichko@umich.edu Kelley assists with students' graduate programs in CEE. This includes coordinating admissions and recruiting, scheduling preliminary examinations, Master's student degree audits, and coordinating the annual PhD evaluation process. Kelley also coordinates various grad student recruiting and informational events. Grad students should also see Kelley if they need a standard letter from the department for any variety of reasons.

*Matt Blank*, Student Services Manager (Room 2166B GGB) blankm@umich.edu

Matt oversees all aspects of undergraduate and graduate student services for the department including coordinating the department schedule of classes. He also processes GSI/GSRA/Lecturer appointments, coordinates student funding, reviews student org funding requests, and manages student services related budgets.

**Pat Brainard**, Department Administrator/Manager (Room 2105B GGB) pbrainar@umich.edu Pat assists the chair in planning and managing the Department's administrative operations, supervises the departmental staff and coordinates efforts to streamline administrative operations.

*Sherry Brueger*, Faculty Support Coordinator (Room 2105A GGB) sbrueger@umich.edu Provides administrative support to all faculty and assists with department activities. Sherry also purchases supplies, processes reimbursements for faculty and students as well as HR documentation including I-9s.

**Stephanie Ford**, Research Process Manager (Room 2160 GGB) zeeford@umich.edu Stephanie in conjunction with her financial team, support faculty with research proposals, budget preparation and the management of the research funding once it has been awarded. She assists faculty, research fellows and students with purchasing requests, and also assists with financial support for the graduate students.

*Susan Kaiser*, Undergraduate Coordinator (Room 2166 GGB) smkaiser@umich.edu Susan is responsible for all undergraduate student services including coordinating the department schedule of classes. She assists the Undergraduate Program Advisor. Susan can also help you with a class permission (override).

*Christine Kropelnyckyj*, Research Process Coordinator (Room 2156 GGB) wroblewc@umich.edu Chris is a member of the Financial Team and works with grants and proposals. She also assists with the financial management of these accounts, including reconciliation. Chris is also available to purchase items needed, and to create and monitor purchase orders and requisitions including M-marketsite carts.

*Jessica Petras*, Marketing Communications Specialist (Room 2105D) jpetras@umich.edu Jessica creates printed and digital pieces promoting the work of the entire CEE community. She maintains the CEE website, manages social media accounts, coordinates media coverage, takes photographs and writes news stories highlighting research and events in the department.

**Tabitha Rohn**, Financial Specialist (Room 2152 GGB) trohn@umich.edu Tabby assists the Financial Team with grants and contracts and general accounting management. Tabby also processes temporary research and instructional support appointments for students.

**Amy Shepherd**, Administrative Assistant to Chair (Room 2105 GGB) shepamy@umich.edu Amy provides administrative support to the Chair and is the central point of organization for the department. She manages the Chair's calendar, coordinates department events, maintains the bulletin boards in GG Brown and oversees the department lost and found.

**Ariane Smith,** Recruitment and Admissions Coordinator (Room 2166 GGB) brariane@umich.edu Ariane will assist with recruitment efforts for the department, assist with admission related items, plan recruiting events, and support student groups. In the interim, she will issue room and building keys, troubleshoot registration issues, handle grad student photo boards, and handle classroom reservations.

*Ingra Stimach*, Administrative Assistant (Room 117 EWRE) istimach@umich.edu Ingra provides administrative support to the faculty. Ingra is responsible for travel and expense reimbursements for faculty and students, p-card reconciling, and managing office supply inventory.

**Rebi Varghese**, Desktop Support Specialist/IT Manager (Room 215 EWRE) <u>rvarghes@umich.edu</u> Rebi provides IT support to the entire CEE department. Rebi collaborates with other IT professionals within engineering to share solutions and resolve problems. He manages servers, security, and access permissions.

## TECHNICIANS

*Steve Donajkowski,* Mechanical Technician (Room 1171 GGB) cee-techs@umich.edu Steve fabricates and test student projects. He also helps with the Geotech lab and sets up lab experiments, maintains equipment and helps during lab sessions.

**Ethan Kennedy**, Electronics Technician (Room 1171 GGB) cee-techs@umich.edu Ethan answers electrical questions and provides assistance on development of instrumentation and control systems for research projects. He is responsible for repair of existing electrical systems, setting up and assisting in the instruction and running of undergrad labs, assisting with data acquisition and troubleshooting.

Jan Pantolin, Technical Services Supervisor (Room 1171A GGB) cee-techs@umich.edu Jan supervises the teaching and research laboratories in Geotechnical, Hydraulic, Materials and Structural Engineering. Jan is a primary contact for safety as well as a facilities representative for the GG Brown building.

Bob Spence, Lab Technician (Room 1171A GGB) cee-techs@umich.edu

Bob performs complex laboratory assignments and selects materials, methods & equipment for use in research projects. He also provides functional lab supervision to students and manages safety issues and training.

**Tom Yavaraski**, Laboratory Services Supervisor (Room 209 EWRE) cee-techs@umich.edu Tom coordinates the operations of analytical facilities and equipment for the department. He is the first contact for safety issues when working in the laboratory and/or working with hazardous compounds. He also coordinates the training, operation and repair of the analytical equipment in the environmental laboratories. Tom is the facility representative for EWRE and an emergency response floor marshal.

## **EXPLORING THE COMMUNITY**

## **UM Events**

Throughout the year, many exciting events take place on the University of Michigan campus. Information on most major UM athletic, cultural, social and other events can be obtained at the <u>University of Michigan Campus Information Centers (CICs)</u>.

Sports fans may want to purchase tickets to UM athletic events by contacting the <u>Athletic</u> <u>Department Ticket Office</u>. Buy early for the best selection! Please note that there are set deadlines to apply for season passes to certain sports, such as football, hockey, and men's basketball.

## Ann Arbor

The University of Michigan is located right in the middle of Ann Arbor; there are no formal boundaries between the campus and the community. University properties and facilities are spread throughout the city, with the four campuses – Central, North, Medical and Athletic – placed among commercial and residential areas. Several of Ann Arbor's shopping areas are interspersed with campus buildings. The downtown area is a shopping and business district which is easily accessible on foot, by bicycle, or by bus. Some of Ann Arbor's attractions, such as the Matthei Botanical Gardens and Nichols Arboretum, and many cultural events, are affiliated with the University. Other events, such as the Summer Arts Festival, are joint ventures between the city and the University. Several medium-sized companies and light industries are located in Ann Arbor. There are also more than 80 industrial research firms and several government laboratories. New industrial and residential areas are thriving on all sides of the Ann Arbor city limits. The city has its own bus system, newspaper, airport, community access television stations, and radio stations. In addition, it serves as the Washtenaw County seat and boasts an active political arena.

The diversity of people at the University makes Ann Arbor a distinctly cosmopolitan place to live. The social, cultural, intellectual, and aesthetic aspects of Ann Arbor mix old and new, conservative and liberal, conventional and experimental. A wide variety of religions, ethnic and national backgrounds, ages, and philosophies are represented in the population. Because of this, Ann Arbor has many well-informed and concerned residents. For instance, support for environmental preservation ranges from city-wide recycling to restrictions on the amount of salt the city may use for snow removal. Ann Arborites are extremely proud and aware of their history and have supported a movement to restore the old downtown area and the "Old West Side." Many older homes have been renovated and decorated, while office buildings have been sandblasted, cleaned, and painted. When the city decided it needed a new downtown firehouse, the original red brick one, long a landmark, became a children's museum, and a modern, low-key addition was built. The old train depot is now a restaurant, furnished with the original waiting room benches, baggage cart, and other memorabilia.

Entertainment and night life in Ann Arbor include much theater and music. New local bands debut weekly in the varied bars and coffeehouses. The Ark is a familiar stop for seasoned blues, folk, and jazz musicians. The Michigan Theater offers art films, classic films, and live concerts. The University Musical Society provides a wide variety of concerts, including famous symphony orchestras from around the world. Discount concert tickets from UMS are available at the beginning of the fall semester. The School of Music, and the Departments of Dance, Musical Theater, and Theater and Drama keep both students and Ann Arbor residents busy with many different performances, from operas to dance concerts to interactive theater. During the summer, the Summer Arts Festival at the Power Center hosts famous performers and singers, while Top of the Park offers nightly movies outdoors and live bands. To complete your evening on the town, Ann Arbor offers an incredible selection of restaurants - ranging from Prickly Pear Southwest Café, to The Blue Nile's Ethiopian delicacies, to Raja Rani's Indian food. However, the more traditional gourmand has nothing to worry about. Ann Arbor is home to many elegant restaurants with a variety of menus including Italian, French, German, seafood, and international cuisines. Additional restaurant information can be found at arborweb.org

## **Detroit Area**

The City of Detroit, founded in 1701, is located 40 miles east of Ann Arbor. Its name is derived from the French words "d'etroit" meaning "of the strait." The city was so named because it is on the west bank of the Detroit River, a strait connecting Lake St. Clair and Lake Erie. According to 2013 census estimates, Detroit has a population of approximately 688,701 making it the eighteenth largest city in the United States. The greater Detroit metropolitan area (Wayne, Oakland, and Macomb counties) population is over 3,734,090, making it the eleventh largest metropolitan area in the nation.

Detroit is known as the "Motor City" because of its international automobile manufacturing and trade industry. Twenty-two percent of the nation's cars, trucks, and tractors are made there. World headquarters for General Motors Corp., Ford Motor Co., and Chrysler Group LLC are located in metropolitan Detroit. Detroit is also a steel and aluminum producing center that furnishes both raw metal and finished products for the automotive industry. In addition to the machine-tool and metal-stamping industries closely allied to automobile manufacturing, the Detroit economy is a leader in the production of paints, non-electrical machinery and automation equipment, pharmaceuticals, rubber products, synthetic resins and garden seed.

Detroit is an international center of transportation and trade. The opening of the St. Lawrence Seaway in 1959 allowed Detroit to become a major port. Today, 60 steamship lines operate out of the city, shipping materials worldwide. <u>Detroit Wayne County Metropolitan Airport</u> is among the world's largest air transportation hubs. Located 18 miles southwest of downtown, the airport and its regional partners offer service to more than 160 non-stop destinations around the globe. Detroit is served by six interstate highways and additional limited access expressways, making the freeway system one of the most efficient in the country. The city is connected to Windsor, Ontario, by the <u>Ambassador Bridge</u> and by the <u>Windsor-Detroit</u> <u>Tunnel</u>. Visitors traveling to Windsor from the United States are required to present an approved travel document in order to cross the border. As a major metropolitan area, the greater Detroit area has many attractions. Among the institutions of higher learning located there are Wayne State University, the University of Detroit, the Detroit Institute of Technology and the University of Michigan, Dearborn. Among Detroit's cultural highlights are its musical organizations and museums. <u>The Detroit Symphony</u> <u>Orchestra</u> is one of the nation's premier musical organizations. Also, a distinctive, popular musical genre that had its beginning in the Detroit recording industry is known as the "Motown" sound.

Museums such as the Detroit Institute of Arts, the Historical Museum, the Detroit Science Center, the Museum of Contemporary Art Detroit, the Charles H. Wright Museum of African American History, the Cranbrook Academy of Art (in Bloomfield Hills) and The Henry Ford (in Dearborn) are nationally acclaimed. <u>The Detroit Zoo</u> is outstanding, and there are many municipal parks, beaches, and marinas. In the athletic arena, Detroit is home to professional teams in major league baseball (<u>the Tigers</u>), football (<u>the Lions</u>), ice hockey (<u>the Red Wings</u>), and men's basketball (<u>the Pistons</u>).

You can learn more about the Metropolitan Detroit Area at <u>http://www.visitdetroit.com/</u>.

## Michigan

Michigan was admitted to the Union in 1837 as the 26th state. Since then, Michigan has granted constitutional autonomy to its public educational institutions. This has helped establish its flagship institutions of higher education as some of the strongest in the nation. Geographically, Michigan is comprised of two perpendicular peninsulas which are surrounded by four of the five great lakes: Lake Superior, Lake Michigan, Lake Huron, and Lake Erie. The state has varied topography and contains highly developed urban areas, as well as protected wilderness areas. Each region of the state has its own cultural flavor and economic base. You can find out more about travel and tourism opportunities in Michigan by contacting the <u>Michigan Parks and Recreation Division</u>.

## APPENDIX

## Campus maps can be found at: <u>https://maps.studentlife.umich.edu/</u>

## ABBREVIATIONS AND ACRONYMS

## Engineering Departments

AERO BME or BIOMED CEE CHE CLaSP COE EECS IS+D IOE ME MSE NAME NERS	Aerospace Engineering Biomedical Engineering Civil and Environmental Engineering Chemical Engineering Climate and Space Sciences & Engineering College of Engineering Electrical Engineering & Computer Science Integrated Systems & Design (formerly InterPro) Industrial & Operations Engineering Mechanical Engineering Materials Science & Engineering Naval Architecture & Marine Engineering Nuclear Engineering & Radiological Sciences
Campus Buildings	
CCRB	Central Campus Recreation Building
GGB	GG Brown Laboratories
EPB	Engineering Programs Building
ERB I/II	Engineering Research Building
EWRE	Environmental and Water Resources Engineering Building
LEC	Lurie Engineering Center
MEPO	Minority Engineering Programs Office
NCIC	North Campus Information Center
NCRB	North Campus Recreation Building
Other	
A2	Ann Arbor
CAEN	Computer Aided Engineering Network
CEW	Center for the Education of Women
CIC	Campus Information Centers
ITS	Information Technology Services
GEO	Graduate Employees' Organization
GSRA	Graduate Student Research Assistant
GSI	Graduate Student Instructor
WISE	Women in Science and Engineering

## **HELPFUL ORGANIZATIONS**

The University community includes many helpful organizations and groups. If you have a problem, or are looking for a group with which to affiliate, there is probably at least one group or resource for you. This list is not exhaustive. If you are looking for something that is not here, ask someone in your department, at the International Center, or at Campus Information Centers at 764-INFO or (734) 764-4636.

Numerous engineering professional and honor societies can be located through the <u>College</u> of <u>Engineering websites</u>

Information on CEE student groups can be found <u>here</u> on the CEE website.

#### Women:

<u>Center for the Education of Women (CEW)</u> <u>Women in Science and Engineering Office (WISE)</u> <u>Graduate Society of Women Engineers (Grad SWE)</u>

## Multicultural Students:

<u>Center for Engineering Diversity & Outreach</u> Office of Academic Multicultural Initiatives

## **International Students:**

International Center

Students Considering Work or Study Abroad or an International Minor for Engineers International Programs in Engineering

## **Students with Disabilities:**

Office of Services for Students with Disabilities

## **Student Instructors:**

<u>Graduate Employees Organization (GEO)</u> <u>Center for Research on Learning and Teaching (CRLT)</u> <u>English Language Institute (ELI)</u>

## LGBT Students

<u>The Spectrum Center - Lesbian, Gay, Bisexual, and Transgender Affairs (LGBTA)</u> <u>Michigan AGEP</u>

## **RECREATIONAL ACTIVITIES**

<u>The Department of Recreational Sports</u> offers a wide range of activities for students, faculty, staff and their families. Recreational Sports Members are now using the Mcard to gain access to facilities. Opportunities are available for participation in Intramural and Club sports, personal exercise, swimming and the Outdoor Adventures Program.

## Outdoor Adventures (OA)

UM Outdoor Adventures is an Outdoor Education Program at the University of Michigan. It is a component of the Department of Recreational Sports and offers recreational and instructional opportunities focusing on outdoor activities. Each year hundreds of people come to OA as participants on trips, to learn new skills in clinics, and to rent outdoor equipment. Trip Leaders and Clinic Instructors are knowledgeable and experienced in the subjects they teach. The Outdoor Adventures office is located in the North Campus Recreation Building.

## Parental Accommodation Policy

Please see here for more information: <u>https://www.rackham.umich.edu/current-</u><u>students/policies/parental-</u> accommodation-policy

## **FACILITIES & RESOURCES**

## Civil (Main Office):

The University of Michigan Department of Civil and Environmental Engineering 2105 GG Brown Building 2350 Hayward Street Ann Arbor, MI 48109-2125 Phone: 734-764-8495 Fax: 734-764-4292 Mailboxes for civil graduate students are located in the copy room in the main office in 2105GGB.

## Environmental

The University of Michigan Environmental and Water Resources Engineering 117 EWRE 1351 Beal Avenue Ann Arbor, MI 48109-2125 Phone: 734-764-6024 Mailboxes for environmental graduate students are located in 142 EWRE.

The Civil & Environmental Engineering Department has a Faculty, Staff and Student Lounge located in 173 EWRE.

## Photocopying

The department copiers are for Faculty, Staff, and GSIs only. Students can print or make copies through the following <u>resources</u> or through <u>CAEN</u>.

## **Office Space**

<u>Very limited</u> office space is available to fellowship students, GSRAs, PhD, and Master's students. GSI office space is located in room 153 EWRE. Please ask your advisor to contact Ariane Smith (brariane@umich.edu) to request office space for you if you fall into one of these categories and were not assigned an office upon arrival. Maintaining office space is the responsibility of the individuals assigned to that office. Please do not leave open food containers, empty pop cans, and trash lying around as this will attract pests. There are university funded cleaning personnel who vacuum and empty the trash and recycle containers once a week. All excess garbage-and ALL food-should be disposed of in the corridor waste receptacles.

## **Building Maintenance**

Building maintenance issues (flooding, pest control, climate control, etc.) during normal business hours can be reported directly to Building Maintenance at 7-2059 or inform any staff personnel of the problem and they will call for you. Building maintenance issues after normal business hours should be reported directly to Building Maintenance at 7-2059 or the Department of Public Safety (DPS) at 3-1131 or 3-8391. If it is an emergency, please dial 911 to report the situation. Please do not assume that the problem has been reported by someone else. It is better to have the problem reported multiple times than not reported at all.

## Keys

A key request form is needed to obtain keys for your office and the labs. Forms will only be given for access to rooms the student directly needs. Key forms must be taken to the Key Office on main campus, 525 Church Street, Room 1103, phone: 734-764-3481. Key request forms may be obtained from Ariane Smith, 2166 GGB. A deposit must be made in cash at the Key Office. Office desk and file cabinet keys can also be obtained from Ariane Smith.

## **Computer facilities**

The Computer Aided Engineering Network (<u>CAEN</u>) has computer labs located around North Campus. A valid Student ID card gains access to these facilities. You need a CAEN account to use CAEN-supported lab machines and receive storage space on the AFS file servers. Most new and/or incoming College of Engineering students receive their CAEN account during orientation. However, if you are a currently enrolled College of Engineering student and have not yet received your CAEN account, you must visit the <u>CAEN Hotline</u>.

## **Building Access**

The entry doors to GGB, Dow, EWRE and EECS remain unlocked during normal business hours. Building entrance doors of these buildings will be locked between 10:00 p.m. and 7:00 a.m., M- F and 24 hours on Saturdays, Sundays, and UM holidays. Entry during these times will be via card readers using your M-Card. Signs are posted on all entry doors to GGB, Dow and EECS with information about entering these buildings while the card reader is operational and telephone numbers to call if problems arise. Expired M-Cards as well as those that are worn out by normal wear and tear may be turned in for a free replacement. This can be done at the Entrée Plus/M-Card Office in B430 Pierpont Commons as well as other locations on campus.

## **Department Media Info**

Please join us by following us on social media and also retweeting information. Here are a few ways you can stay in touch with what's happening at CEE.

Twitter: https://twitter.com/UM\_CEE

Facebook: https://www.facebook.com/UMCEEFA

Instagram: <a href="https://www.instagram.com/um\_cee/">https://www.instagram.com/um\_cee/</a>

LinkedIn: <u>https://www.linkedin.com/groups/2856795/</u> (Right click and copy this hyperlink and paste into new browser)

For any news items to post, please contact Jessica Petras at <u>ipetras@umich.edu</u> or <u>cee-marketing@umich.edu</u>

## **Computing Resources**

1) As a College of Engineering (CoE) student you got a CAEN account. CAEN is the computing group dedicated to the CoE. There are many valuable resources that can be found through CAEN that will allow your classroom and research experience to go smoother. More info on CAEN account found here: (http://caen.engin.umich.edu/accounts/overview)

2) You will have 24 hour access to CAEN labs. The CAEN labs are stocked with powerful machines with many popular software titles that you will use as you continue on in your research. (<u>http://caen.engin.umich.edu/computers/overview</u>)

3) As a CoE student you get printing allocation from both CAEN and ITS. You will also be able to print your personal machines to lab printers. More information ca be found on the this website: (http://caen.engin.umich.edu/printing/overview)

4) U of M uses the full Google suite for email, calendaring and other collaborating resources. Google is a powerful tool for collaboration and this relatively new resource will help you in working with your class, or research groups. (<u>http://google.umich.edu/</u>)

5) You can use one of the three wireless networks here to connect your personal devices. Information on our wireless networks can be found here: (http://www.itcom.itd.umich.edu/wireless/)

6) Use Google sites (<u>https://sites.google.com/new</u>), to setup your personal website or you can also use your umich webspace to create a site (<u>http://services.it.umich.edu/hosting- website-services</u>).

7) If you plan to go out of town, you may leave a vacation notice by using your
MCommunity away message tool. More information about this can be found here:
(<u>https://documentation.its.umich.edu/mcommunity/set-your-away-message-mcommunity</u>).
Please do not use the google away message, because it causes conflicts with our system.

## **CEE IT Assistance**

If you need any computing assistance with department owned research machines or your personal computing account, please contact cee-it@umich.edu.

## **Reserving Conference Rooms/Blue Lounge**

Reserving conference rooms, other classrooms or event spaces, email CEE-Rooms@umich.edu

## **Lab Information**

Safety training will be required before working in the labs. For information, please visit this page from our <u>website</u>.

Lab requests and procedures: See this <u>link</u> on the CEE website.

## Purchasing/Shipping/Reimbursements Procedures and Forms

Please see this <u>link</u> on the CEE website for purchasing, shipping, and reimbursements. If you have questions, please email: <u>CEE-AdminTeam@umich.edu</u>.

## Travel Registry Information:

Per University policy, SPG 601.31 <u>https://spg.umich.edu/policy/601.31</u>, it requires all faculty and students traveling outside the 50 states for UM business to register their travel. THIS INCLUDES CONFERENCES.

The University Travel Registry is the official source of traveler information for locating and communicating with travelers, responding to emergencies, and managing media and public relations during critical incidents abroad. It also serves as the central source of travel abroad data for institutional reporting.

All Students traveling abroad are required to have travel abroad health insurance coverage from the University's authorized vendor, regardless of whether the Student traveler has other health care coverage. This international insurance includes coverage for emergency evacuation in the event of a medical issue, political instability or natural disaster. The cost is minimal (<\$2/day) and can be reimbursed if you save your receipt.

Please visit <u>http://global.umich.edu/travel-resources/register-your-travel/</u> for more information and to register.

## Michigan Newspapers and Map of CEE

The Michigan Daily can be found at <a href="https://www.michigandaily.com/">https://www.michigandaily.com/</a>

The University Record can be found at <u>https://record.umich.edu/</u>. Hardcopies can be obtained in the main CEE office.

There is a map of the GG Brown offices and laboratories on main office window.

## **No Smoking Policy**

All of The University of Michigan buildings are smoke-free. The UM campus is completely smoke free as of July 2011.

## Lost & Found and Bulletin Board

The Lost & Found is located in Room 2105 GG Brown. Announcements of jobs, scholarships, graduate schools, seminars, weekly meetings, student registration information, graduation information, etc. can be found on the bulletin board in the hallway outside of the main office and also various information on the boards outside of the Student Services office (hallway overlooks the structures lab).

## **Miscellaneous Information**

<u>Pierpont Commons</u>, located on the corner of Bonisteel and Murfin, contains a cafeteria, deli, several commercial eateries, business offices, a housing office, University Registrar, I9 office, MCard office, Office of Financial Aid a branch of the University Credit Union, a bookstore, UM computer showcase, and an information desk.

College of Engineering Academic & Administrative Offices are located in the Lurie Engineering Center, 1221 Beal Avenue.