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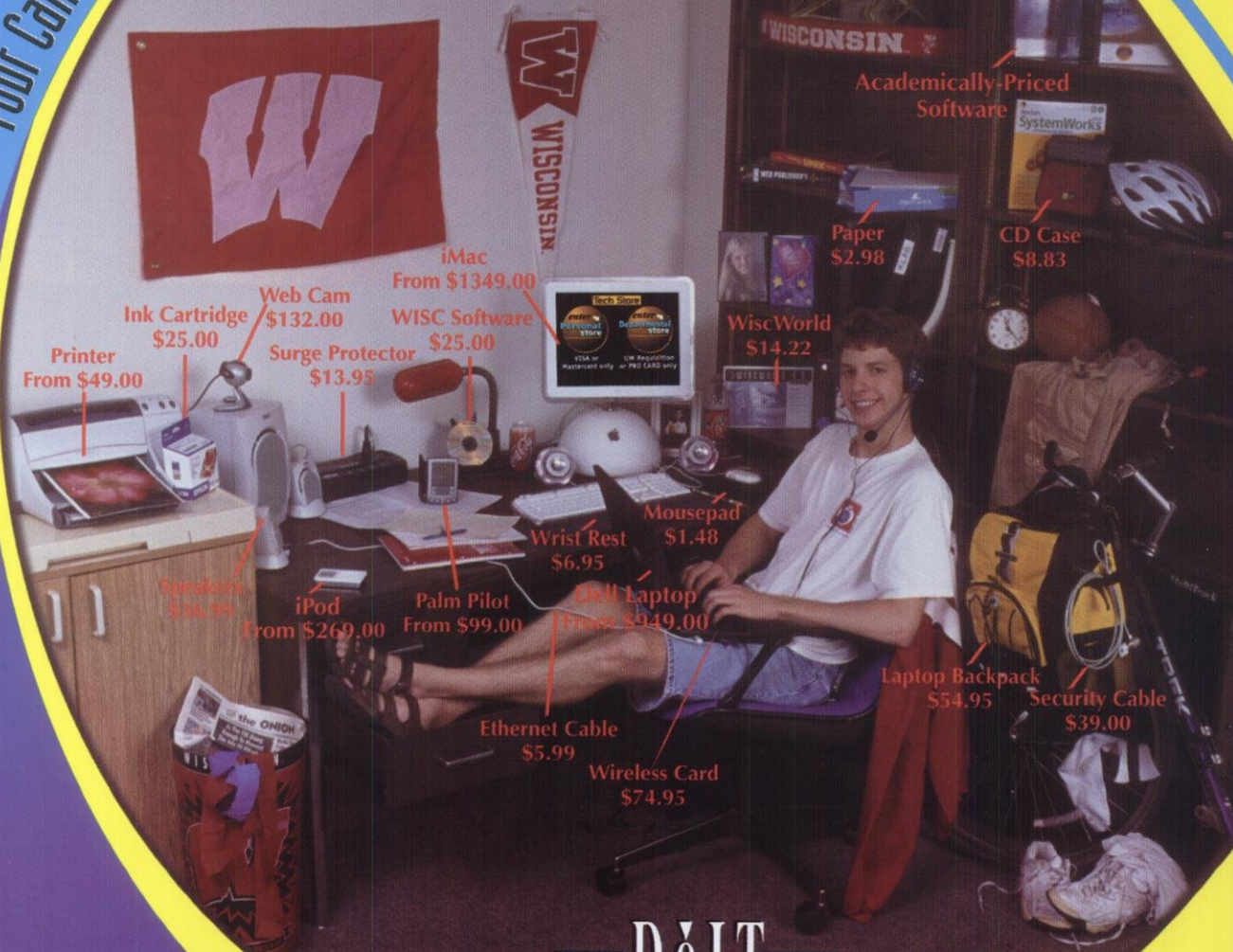
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wisconsin engineer

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Wisconsin engineer

Published by the Students of the University of Wisconsin-Madison

Summer 2002

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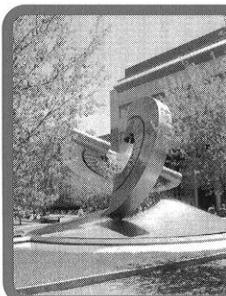
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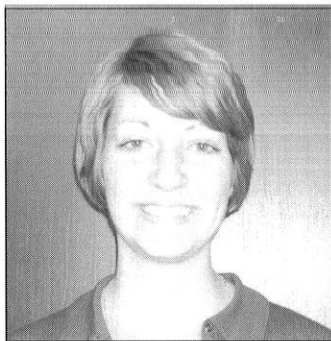
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On the Cover

The Descendant's Fountain, also known as Maquina, is the trademark of the College of Engineering.



Welcome!

Hello! I'd like to welcome you to the University of Wisconsin and the College of Engineering. Inside this special pre-engineering issue of Wisconsin Engineer Magazine you will find a survival guide of sorts to the world of the engineering campus. Since many of you will be spending the majority of the next four years (or so) of your life here, we thought we'd give you a running head start.

When class first starts it may become a little overwhelming, but we hope that this issue can help you find the right buildings you need to be in, the best places to study and other helpful hints such as these. There are also many opportunities to join clubs and make friends at the beginning of the semester. You can use this magazine to figure out which kickoff meetings you'll want to go to – which may still be all of them if for nothing else than the free food. One great activity that you can get into is this magazine! Wisconsin Engineer is run solely by students and allows opportunities to learn new skills and get published. It's also the only "engineering" group that's not just for engineers, so you can meet people from all over campus in one place.

Why not expand your horizons over the stacks of textbooks and computer terminals that will soon be running your life and get involved! Remember college is what you make it, so have fun (at least for your freshman year, before classes get really hard).

Good luck and I hope to see you around campus and especially at the Wisconsin Engineer kickoff meeting.

Darcy Grunwald
Co-Editor-in-Chief

Wisconsin Engineer Summer Staff

Editors-in-Chief

Darcy Grunwald
Aristo Setiawidjaja

Writing Staff

Karen Mandl
Nicholas Mueller
Toyyab Murtaza
Lizabeth Wyma

Photography Staff

Meg Cox
Jen Rowland

Production Staff

Ben Hackel

Funding Staff

Amanda McGraw
Nicholas Mueller
Allison Wittmer

We would like to thank

Gisela Kutzbach
Sarah Pfatteicher
Bonnie Schmidt
Maggie Tongue
Don Woolston
Eman Zaki
College of Engineering
Polygon Engineering
Council



The College of Engineering
University of Wisconsin-Madison



ASM

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All interested students have an equal opportunity to contribute to this publication.

Faculty Advisor: Susan Hellstrom Publisher: IMAGESETTER, Madison, WI

Correspondence: Wisconsin Engineer Magazine, Mechanical Engineering Building, 1513 University Ave., Madison, WI 53706. Phone (608) 262-3494.

E-mail: wiscengr@cae.wisc.edu. Web address: <http://www.wisconsinengineer.org>

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COMING SOON IN FALL 2002

In May 2000, five "temporary" buildings that graced the corner of University Avenue and Breese Terrace were torn down after serving a variety of purposes since World War II. On June 20 of that same year, the groundbreaking ceremony took place for the new Engineering Centers Building (ECB). The new building is scheduled to be complete this summer and is planned to be in full use by the middle of the Fall 2002 semester.

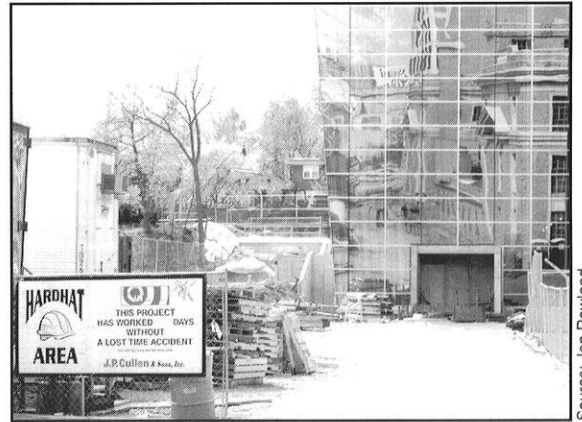
The 135,000 square foot building is designed to draw together many aspects of the College of Engineering, such as learning how to apply knowledge, using creativity and building a sense of community. Figuring in such abstract ideas with the architect was all part of an exciting planning process that included students, faculty and administration.

Student organization offices will be located in ECB around a common area. This was

done to develop a community and shared resources with hopes of creating a stimulating learning environment that will both draw and keep students in the college.

The floor plans are laid out with maximum flexibility in mind. Manufacturing and production-related programs are on the second, third and fourth floors, and undergraduate work centers are in the basement and on the first floor. The Phillips Plastics Discovery Center, with labs and hands-on project rooms, will be part of what ECB has to offer students.

The primary purpose of the Discovery Center will be to provide planning, designing and assembly space for student teams working on engineering projects, both curricular and extracurricular. Workbenches, hand and



The rewards of over two years of construction will soon be realized by UW engineering students.

power tools, assembly space and breakout areas for brainstorming or quiet discussion are all included to encourage people to work together. Resources including Internet access, supply catalogs, space for planning, modeling and project storage will be available and can be checked out for extended periods for specific projects. The Discovery Center will focus on providing a place for freshmen and sophomores to discover and learn about engineering.

ECB is also designed to facilitate interactive learning, with selected exposed structural, mechanical and electrical systems. Heating, ventilating and air conditioning equipment may be equipped with sensors so students can monitor temperature, airflow, or humidity. Windows with various glazing materials may be installed to allow students to measure and compare solar gain and heat loss. The inner workings of an elevator could be displayed to reveal physics in action. The possibilities are exciting for any engineer.

ECB is turning out to be much more than a new engineering building. It has transformed into a melting pot combining research center, classroom, exposition hall and museum. It will be a place where students can gather, ponder, reflect, think, study, celebrate, debate, live, learn and much, much more.

Karen Mandl



Engineering Centers Building (currently under construction) will be a hot spot to meet with your friends for student organization meetings.

Where Do Engineers Study?



Finding the Perfect Place to Hit the Books

It is no secret that engineers work hard. When the degree is complete, all the hard work will pay off, but to get that far you need to find a good place to study. Here are some of the places around the Engineering Campus where students do their hard work...

Wendt Library

In 1971, College of Engineering Dean Kurt F. Wendt retired after 18 years of serving as Dean. He not only left an expanded Engineering Hall and graduate curricula in Nuclear Engineering and Industrial Engineering for future students to remember him by, but his name also graces the library that serves the College of Engineering and the Departments of Atmospheric and Oceanic Science, Computer Science and Statistics.

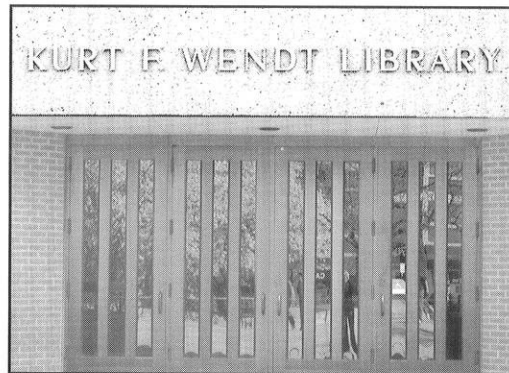
The library boasts a collection of nearly 300,000 book and serial volumes, 1.5 million

reports and government documents, and all U.S. patents. It currently receives about 3,000 journals and serials, making it a great resource for any report or project. During the day, knowledgeable staff members can help with any questions you may have and offer workshops about finding resource material and other ways to use the library. Wendt also offers an email reference, called AskWendt, to answer your questions from home (askwendt@doit.wisc.edu). Course material on reserve for your engineering classes can also be found in Wendt Library.

Along with its helpful staff and wealth of printed material, Wendt Library offers many other resources. Several CAE remote labs (first and fourth floor) and a DoIT InfoLab (first floor) can be found within the building.

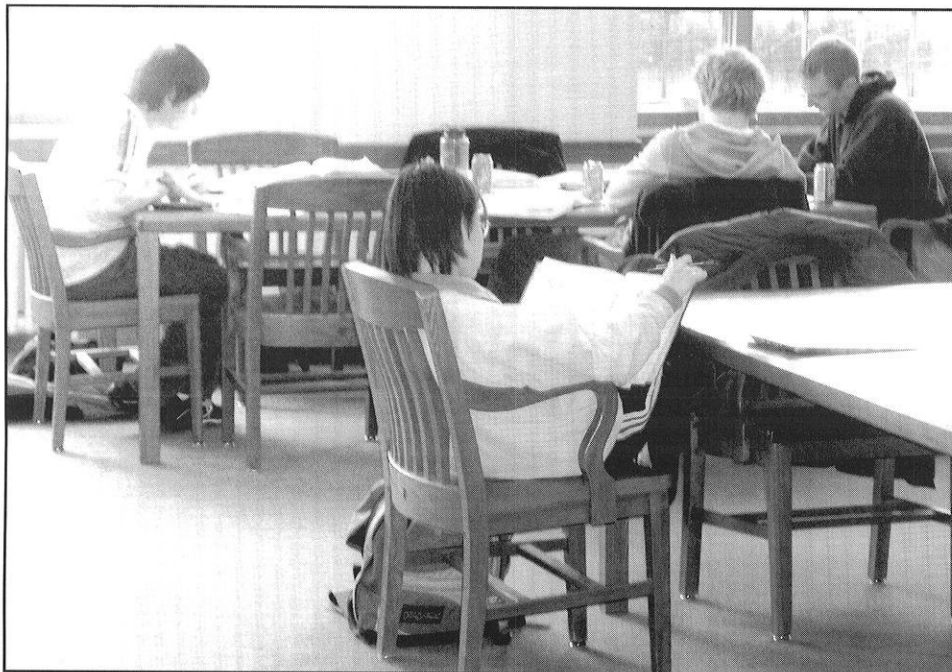
On the fourth floor, tutoring services for several calculus or physics classes can be found almost every night of the week. Information and schedules for these

tutoring services can be found on the fourth floor itself or at <http://studentservices.engr.wisc.edu/classes/tutoring/wendt.html>.



Source: Jen Rowland

It's not a dungeon; it's Kurt F. Wendt Library, a great place to study.



Source: Jen Rowland

The upstairs lobby at Mechanical Engineering offers a great view, plenty of light, and lots of fellow hard-working engineers.

On the first and second floor, large tables and individual desks are scattered amongst the aisles of books and journals. The third floor of Wendt Library is reserved for quiet study only, and the fourth floor is reserved for group study. Engineering classes may require a lot of group work on homework and projects, so the fourth floor is a common place to be on any night of the week. You can usually find someone to answer any question you might have about an assignment or even how long the Quick Byte is open in Union South to get ice cream. A real team atmosphere can develop after spending long nights at the library getting through a problem set, and you usually get to know your classmates in the process.

Mechanical Engineering Lobby

If you enjoy a more social study atmosphere, the Mechanical Engineering Lobby is a popular place for Mechanical



Source: Jen Rowland

Engineering Hall lobby is a nice central location to meet people, arrange your affairs between classes and take a break.

and Industrial Engineers to gather and study. It offers tables, comfortable chairs, a CAE remote lab and plenty of people working on the same material as you. An added advantage to studying here is that the ME building is open late for those assignments that take awhile to complete.

Union South

Union South can be a great place to meet up with a group of friends or get some work done. The cafeterias for Einstien's and the Red Oak Grill offer tables and chairs and a chance to be efficient by eating your lunch while you study. The lounge on the main floor has a few tables,

A real team atmosphere can develop after spending long nights at the library getting through a problem set

but mostly comfortable chairs and couches to stretch out or curl up on to read. When it is cold outside, the fireplace in the lounge is lit and creates a very cozy atmosphere. Finally, the basement of Union South offers a tucked away table or couch to get some work done. The best attribute of this location is its close vicinity to the games room and food in case a quick study break is needed.

Engineering Hall

Within Engineering Hall there are several different places to grab a seat and study. The lobby always has a place to sit, but be careful because the high traffic volume can be distracting.

The Cheney Room is hidden between the main entrance to Engineering Hall and room 1800. It has tables for group study, chairs for reading and a nice, quiet atmosphere for getting work done.

Engineering Hall is also filled with all sorts of nooks, crannies and alcoves that are perfect for some between class homework. There are chairs, a good view and very few other people on the third floor of the front of the new part of the building. There is also the floor in the hallway right outside your next class in which the homework is due—hopefully you do not have to use the hallway very often.

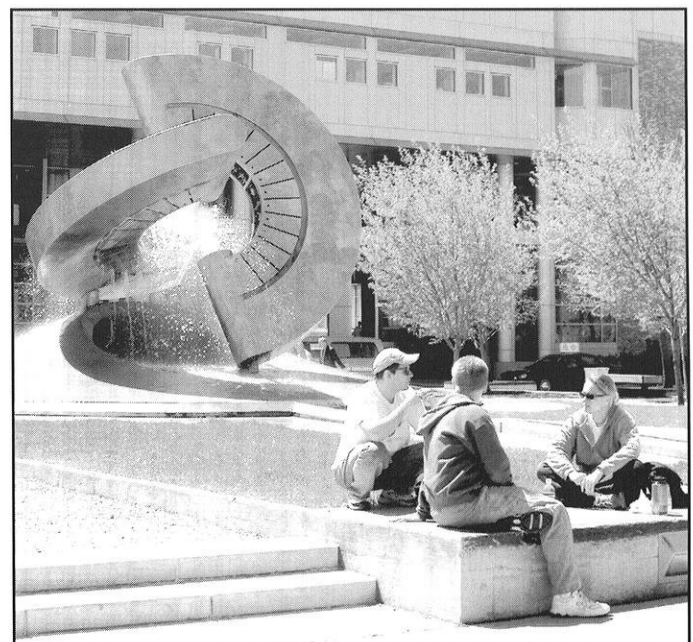
Engineering Lawn

Engineering Lawn might not be the most productive place to study, but when the weather is warm and the sun is shining, it is definitely the most popular. You can lay out on the grass, splash your feet in the fountain or sit on a bench underneath a tree. However, you may have to watch out for stray frisbees from engineers on their study break. Enjoy the nice weather, but still make sure you are able to get work done.

Computer-Aided Engineering

For those times when homework requires a computer or you want to look at old tests and solutions on the Internet, CAE is the spot to study. It has hundreds of computers scattered all over the engineering campus and any software program you need to do your homework or project. For large projects or those who procrastinate, the main CAE building is open 24 hours a day, seven days a week. If your studying needs require a computer, CAE is a great place to go as long as you are not easily distracted by the Internet.

 Karen Mandl



Source: Jen Rowland

Engineering Mall lets you enjoy the fountains, trees, and grass.

Undergraduate Research: *Mezera Makes It Work*



It all started as an assignment for class. Then it turned into a summer job. And three years later, it is still being worked on. Is it the world's most horrific assignment or a tremendous opportunity?

As part of a Chemistry 116 assignment, chemical engineering student Andrew Mezera began doing research for Professor Nicholas Abbott in a chemical engineering lab that works primarily with liquid crystals and surfactants. Mezera's research was with light-sensitive surfactants called BTHA.

When the semester ended, Abbott offered Mezera an opportunity to continue his work throughout the summer. It was then that he began working with the redox-active surfactant alignment of crystals. Mezera became so engrossed in the research over the summer that he came back to work in the lab the next two summers. By the end of his second summer, he was tweaking his procedures and trying new things.

Mezera enjoyed getting something hands-on to which he could apply his classroom knowledge. He was also often familiar with technical topics or ideas before he learned about them in class and thus able to grasp them quickly.

At the end of the past summer, one of the graduate students suggested Mezera present his research at the February 2002 American Institute of Chemical Engineers (AIChE) conference in Ann Arbor, MI. Mezera thought it was a great opportunity "to learn how to present [my] work, both the process of putting it together and the actual presentation itself." So he be-

"It was also cool to know that I was the expert on my subject, even though there were people with PhDs listening to me."

gan preparing a highly technical presentation on the "Active Control of the Anchoring of Liquid Crystals Using Ferrocenyl Surfactants." Mezera says he learned more about his system while preparing for the presentation than he did while working on it, because "it forced [him] to sit down and really learn what was happening in order to be able to explain it to someone else."

"Before my presentation, I was extremely nervous," Mezera says of the February morning he presented.

"They were running late, and I was supposed to go first, so all I could do was sit and wait. On the other hand, I was really excited. I really liked my research and was eager to share it with others. It was also cool to know that I was the expert on my subject, even though there were people with PhDs listening to me." Mezera's presentation was a success and he was able to answer the judges' questions



Source: Karen Mandl

Mezera looks for the results of his work on crystal slides through a microscope.

smoothly. At the awards banquet that night, Mezera accepted his award for second place in the presentation competition, an award that came with a \$75 check and a year-long subscription to the AIChE Journal.

Thanks to a freshman chemistry project, Mezera had the chance to see what research was like and consider different research opportunities before deciding on a career path. Although he enjoys doing research, there are still other experiences he wants to try. Instead of working in the lab again this summer, Mezera will be working on co-op as an engineer for Cargil. However, he recommends that anyone who wants to get a closer look at what his or her field has to offer should look into doing lab research. Who knows? Your next assignment for class could turn into the beginning of your career.

 Karen Mandl



Source: Karen Mandl

Mezera shows off his slide preparation handiwork as he creates slides for testing and observation.

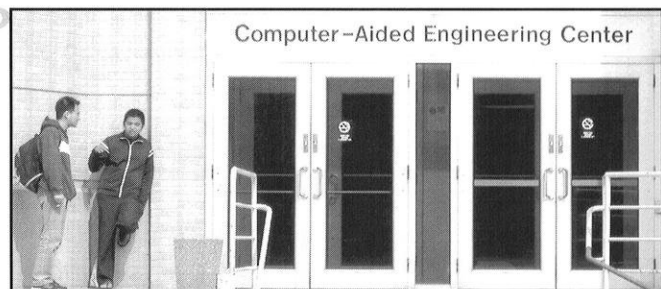
Computer Aided Engineering

A Quick Primer

Over the last decade, computers have become increasingly important to an engineer's education to the point where it is almost impossible to do anything without one. To give everyone the programs and electronic resources they will need for their classes, every College of Engineering student has been given a Computer-Aided Engineering (CAE) account. Your account gives you access to software, printing, email, the Internet and at least 50 megabytes of disk space for storing files.

Where?

CAE is in the building across from Engineering Hall at 1410 Engineering Drive (consult the article "Engineering Campus Buildings" for a map). The entrance is through a set of double doors facing the fountain on Engineering Lawn. There are also several CAE remote sites scattered throughout the engineering campus, such as in Engineering Hall, Mechanical Engineering, and Wendt Library.



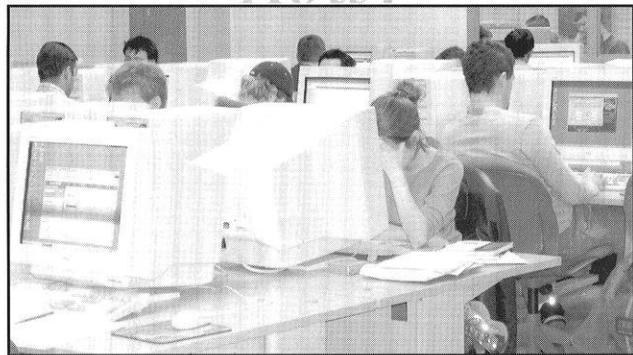
Source: Jen Rowland

CAE: Come to e-mail; stay for seven hours. Trust us.

- CAE provides a broad range of services including technical support, printing, e-mail, training and CD burning. There are several clusters of Windows NT computers, Sun Solaris Unix workstations and Linux workstations.
- CAE consultants are available to assist with operational problems, including basic computer usage, accessing software and printing. Consultants can offer only limited assistance for actually running programs; your best resource to this end is usually a friend or an upperclassman.
- CAE maintains a set of tutorials that introduce specific topics and programs to users. These documents assist users in getting started within a topic area, and are freely available in room 170 of the CAE building.
- Laser printers are connected to the Windows and Unix workstation network. Each semester every student gets a paper quota of 300 pages to print from their CAE account. Additional pages can be purchased for 10 cents a page.
- Email programs are set up on each CAE computer, allowing for a quick check between classes or while working at CAE.
- Short courses are taught at the beginning of each semester, with topics such as Introduction to Unix, which take one hour.
- You can save copies of files onto CDs on many of the CAE computers. Directions for this process can be found on the CAE website (www.cae.wisc.edu/help/handouts/default.shtml). One thing to keep in mind, however, is that making copies of copyrighted software or documentation is a violation of the University Discipline Code and the Wisconsin Criminal Code.

W
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How?



Source: Jen Rowland

CAE computer labs offer the latest engineering software to make your life easier.

Most engineering students take advantage of all of the services CAE has and often spend much of their time in a CAE computer lab. The resources CAE has to offer apply to any and every engineer and can help you compute your way through many of your assignments successfully.

 Karen Mandl

It is advantageous to set up your CAE account as soon as you begin classes. A handout for how to set up your CAE account can be found in the consultant's room of the CAE building (room 172), or you can follow these quick directions:

1. Go to a Windows computer in any CAE lab.
2. Simultaneously press: Ctrl+Alt+Del
3. Use "newuser" as the name and leave the password empty.
4. Click OK
5. Enter your ID number and other requested information.
See a consultant if your ID is rejected.
6. Choose a password that is at least six characters

Get Involved!

E N G I N E E R I N G

O R G A N I Z A T I O N S



American Institute of Chemical Engineers

The UW-Madison chapter of the American Institute of Chemical Engineers (AICHE) strives to enhance the undergraduate chemical engineering experience by educating members on opportunities in industry and academia, providing advising and tutoring for all engineers and organizing social activities to foster interaction outside the classroom. AIChE organizes meetings with representatives from various chemical engineering professions, both traditional (General Mills, Kimberly-Clark, or Merck) and non-traditional (United States Air Force or patent law). Representatives typically discuss their employer and then present on topics such as interview tips or typical problem and solution management in industry. Regular meetings are generally twice a month on Wednesdays at 6:00 pm with free pizza and soda. In addition to regular meetings, AIChE organizes advising sessions to provide insight on curriculum planning and course selection from a student's perspective. AIChE also organizes a number of social events including intramural sports, golf outings with industry representatives, movie nights, trips to conferences and banquets. Joining AIChE provides a great opportunity to learn about the type of work chemical engineers perform in industry and can help students determine if chemical engineering is a major that is right for them. It also offers a great opportunity to meet fellow chemical engineers and learn about what to expect in the years to come at UW-Madison. Finally, joining AIChE means you get one of the always-enterprising t-shirts, with topics such as "Chemical Engineering Terms that Sound Dirty but Aren't." For more information, check out the website: www.cae.wisc.edu/~aiche/ or email any of the officers listed on the site.



American Society of Agricultural Engineers

The UW-Madison American Society of Agricultural Engineers (ASAE) Preprofessionals Club is a professional organization for students interested in engineering for agriculture, food, and biological systems. The club strives to provide opportunities for its member to be active in a variety of engineering areas within the agricultural, food, and natural resources industries. Members are able to establish contacts with professionals in industry and build relationships that may be beneficial when seeking future employment. UW-Madison's ASAE chapter also holds monthly meetings with industry speakers, social events including skiing and snowmobiling and tours to local industry plants and other activities that encourage students to get to know their peers and the department faculty. ASAE competes in the 1/4 Scale Tractor and Environmental Design Competitions, which allow students to work in teams and get practical, hands on engineering experience. Through involvement, students gain leadership abilities and knowledge of industry that is greatly sought after in the professional world of agricultural engineering. For more information, stop by 460 Henry Mall or check out these websites: bse.wisc.edu/asae/ and www.badgerpulling.org/.

American Society of Civil Engineers



The American Society of Civil Engineers (ASCE) is one of the oldest professional engineering organizations. As a student organization, ASCE informs engineering students about issues and projects in the real world by having guest lecturers speak at meetings held every other Thursday. Each year, the UW-Madison chapter competes in the National Concrete Canoe and Steel Bridge Competitions. During the course of the year, ASCE also participates in community activities such as Adopt-a-Highway, Trick-or-Treat for cans, E-week, Expo, fundraising pizza sales and much more. ASCE's primary goal is to become involved in both the community and professional world. Members are exposed to speakers and activities that will help them gain knowledge of their future profession and life after college and make contacts for future employment. Joining ASCE is a great way to meet fellow civil engineers and get involved on campus. For more information, check out these websites: www.cae.wisc.edu/~asce.htm, www.cae.wisc.edu/~canoe/, and www.cae.wisc.edu/~Bridge/Bridge3.htm.



American Institute of Aeronautics & Astronautics

The American Institute of Aeronautics and Astronautics (AIAA) is a non-profit organization that serves the aerospace profession. The primary purpose of the chapter at the UW-Madison is to advance arts, sciences and technology of aeronautics and astronautics and to foster and promote the professionalism of those engaged in these pursuits. The organization is supported by the College of Engineering, and in particular by the Department of Engineering Physics. The majority of its members are from the Engineering Mechanics and Astronautics department, as this major encompasses the interests of the organization, although all majors are welcome to join.

AIAA looks for members that are enthusiastic about aerospace, though no particular skill set is required, just a willingness to learn and become involved in the exciting opportunities that are available. There is no expected time commitment.

The organization holds its kick off meetings the second week of every semester. For further questions or concerns, the organization can be reached at aiaa@cae.wisc.edu, or can be found on the web at <http://www.cae.wisc.edu/~aiaa/index.html>.



American Society of Mechanical Engineers

The American Society of Mechanical Engineers (ASME) is the largest engineering student organization at UW-Madison. They provide a fun, organized setting for mechanical and other engineers to interact professionally and socially outside of class. This is done through community service, social events, engineering conferences, industry speakers, factory tours and many other activities. ASME strives to provide skills, knowledge and leadership to prepare engineering students for their future career. While accomplishing all this, ASME always makes sure to have a good time.

ASME members come from all different engineering backgrounds and educational levels. Like anything, new members will get as much out of ASME as they put into it. The more outgoing, enthusiastic and organized members move on to fill a leadership roles as officers, even by the second semester of their freshman year. But even members who come to only one or two events a semester are benefited by their involvement.

ASME is a great way for freshmen to meet other engineers in a friendly setting, which will make the College of Engineering seem smaller and more manageable. They will meet students from their classes, making it easy to form study groups, and meet new friends. At the same time, ASME prepares engineers for the real world—more than just going to class.

Pre-engineers who wish to be involved in ASME should contact the organization Membership Chair, Chandler Nault, at 441-1419 or via email at cnault@students.wisc.edu. Other concerns can be addressed directly to ASME via their phone at 262-2973, or over the Internet via email or their website, asme@cae.wisc.edu and www.engr.wisc.edu/~asme, respectively. ASME's opening meeting in Fall 2002 will be held September 10 at 5:30 PM in room 159 ME building. Be sure to come for free pizza and soda! General meetings are held every other Tuesday thereafter.



American Nuclear Society

The American Nuclear Society is a national organization dedicated to promoting the nuclear sciences and furthering the development of nuclear technology. The UW-Madison Student Chapter sponsors monthly meetings bringing professionals from the fission, fusion and medical physics communities to the university, as well as a number of social events throughout the year. The UW Student Chapter is dedicated to educating the public, especially young students, about nuclear science and policy. The ANS is an organization for those interested in all aspects of nuclear science and technology, from commercial fission reactors to nuclear medicine. If you have any questions about the American Nuclear Society, you can email Ross Radel at rfradel@students.wisc.edu, or check us out on the web at <http://ans.ep.wisc.edu/>.

Construction Club

The Construction Club is a club for anyone interested in general construction, mechanical systems contracting or electrical systems contracting. The club primarily consists of Civil Engineers; however, all disciplines and years are welcome. The club's main purpose is to provide students with information and contacts in the construction industry in order to develop great career and internship opportunities as well as further education beyond the classroom. Monthly meetings involve speakers from various aspects of the industry, and the club also participates in site visits, service projects and fundraising activities. Attending national conferences and the spring banquet also provides valuable first-hand industry knowledge and opportunities for industry contacts. For more information, email the Construction Club at cclub@cae.wisc.edu and watch for information regarding the fall kick-off during the first few weeks of the semester.



Society of Women Engineers

The Society of Women Engineers (SWE) is often regarded as one of the College of Engineering's most active student organizations. As a multidisciplinary organization, its twice-a-month meetings offer information and tips on both academic and in-the-field topics that are applicable to everyone. By joining SWE, you can become part of a nationally renowned outreach program that brings the fun of science and engineering to middle schools, or you can be a part of a mentoring team and either mentor or be mentored. You can participate in social activities such as trips to Chicago or community service activities such as Ronald McDonald House. And you can attend plant tours or help with cook-outs and the COE Winter Formal. Since SWE is a national professional organization, the reputation that comes with being a SWE member can allow for scholarships, great contacts in industry and jobs. Though SWE is an organization that supports women in engineering, it is not only for females. The many men who are active in SWE are looked upon as more diversity oriented and knowledgeable. Because diversity is such a growing trend in the corporate world, involvement in SWE is a definite advantage to anyone. For more information, check out the website at www.cae.wisc.edu/~swe or email swe@cae.wisc.edu.



Institute of Electrical and Electronics Engineers

Institute of Electrical and Electronics Engineers (IEEE) is a worldwide professional organization that puts forth standards that are enacted throughout the entire world. The UW-Madison IEEE branch hosts industry presentations and participates in various student organization functions. The branch also has a very active robot team that competes in the Engineering EXPO and in various other competitions outside of Madison.

People that are considering being part of the organization should have an area of interest within electrical, computer engineering or computer science. A freshman may be involved as much as he/she wishes. Currently, the organization is looking for young officers that can replace members that will be graduating with in the next year. Members are expected to be present at meetings and social events and may also volunteer to take part in other projects such as the robot team. No specific date is set for the kickoff meeting, so students should watch their email early in the year.

Recruitment is continuous and becoming a member of the organization is easy: just contact Mary Van Himbergen at vanhimbergen@students.wisc.edu. Other questions and concerns can be directed to the organization's email address: ieee@cae.wisc.edu, or may be answered on the IEEE local chapter websites:

www.cae.wisc.edu/~ieee and
www.cae.wisc.edu/~ieeerobo/.



Human Factors and Ergonomics Society

Human factors is a science that explores human capabilities and behavior and how these characteristics are incorporated into designing jobs, consumer products, and work places. It is based on the principle that we have to accommodate the limits of human performance in order to make jobs, products and workplaces safe, effective and satisfying for all. The Human Factors and Ergonomics Society (HFES) seeks to make human factors and ergonomics more accessible as a practice and profession by increasing its visibility among the undergraduate, research and professional communities. HFES is looking for enthusiastic and motivated freshmen from varying disciplines such as Engineering, Business, Psychology and Sociology who can participate in our activities and contribute to our organization's diversity and richness of experience. HFES, in turn, allows students to grasp a better understanding of Human Factors and Ergonomics, network with upperclassmen, professors and industry professionals, use organization resources to assist in finding internships and co-ops, experience peer advising and gain some exposure to industry experts. Pre-engineering students interested in HFES should contact the organization's Recruitment officer, Farheen Khan, or the faculty advisor, Pascale Carayon. The organization's e-mail address is hfes@cae.wisc.edu, and there is a website at www.cae.wisc.edu/~hfes.

Engineering EXPO

Once every two years, the College of Engineering puts on one of its largest events, Engineering EXPO. In April 2003, thousands of people from all over the state and nation will come to discover what is new in industry and the College of Engineering. Such a large event is made possible through the help of volunteers. As a freshman, it can be beneficial to volunteer because it will expose you to what student organizations, student researchers and some of the top engineers in industry are doing. It will also get you a free t-shirt, free entrance to the event, something to put on your resume and an opportunity to get involved in the College. The event only lasts two days, so the time commitment is small, but the effort is greatly appreciated. Look for information about volunteering in spring semester.



Biomedical Engineering Society

The Biomedical Engineering Society (BMES) works to promote the increase of biomedical engineering knowledge and its utilization by reaching students that are interested in the application of science and engineering principles to medicine. In order to meet the needs of its members, BMES provides the opportunity for development in several major areas: academic, personal, professional and social. The Society recruits enthusiastic students that are ready to learn and help better the organization.

The organization holds its kick off meetings early in each semester, though no dates are set. Students are welcome to come to the general meetings which are held every Wednesday evening at 6.30pm (free food is provided). For further information about BMES email them at bme@cae.wisc.edu or go to their website at www.cae.wisc.edu/~bmes.



International Association for the Exchange of Students for Technical Experience

Founded in 1948, the International Association for the Exchange of Students for Technical Experience (IAESTE) is an international network that coordinates on-the-job training for students in the fields of engineering, computer science, mathematics, natural/physical sciences, architecture and agricultural science. As such, the organization is designed for those students that are considering working abroad. Students are welcome to attend the general meetings that are held every Monday at 8 pm in Union South (check the Today In The Union bulletin board for the room). No definite date is set for the kick off meeting, but all students are sent an email early in the year detailing when the kickoff meeting will take place.

Recruitment of students takes place all year long. Chad Heitman, the local committee president, is responsible for recruiting students and can be contacted at caheitman@students.wisc.edu. Any questions or concerns beyond sign-up can be emailed to the organization at iaeste@cae.wisc.edu. The organization also maintains a website at <http://www.cae.wisc.edu/~iaeste/>.

Greater University Tutoring Service



Each year more than 20,000 students participate in Greater University Tutoring Service (GUTS) programs, making it the largest organization of its kind at any American college or university. GUTS' tutoring is a volunteer tutoring organization which provides free tutoring to all students attending the University of Wisconsin-Madison. GUTS main objectives are to offer services to students to help better their grades and help to improve their study skills.

Programs such as the "Academic Match Program" are designed specifically for students that wish for frequent help in specific courses. Programs like "Drop In Tutoring" offer help to students that acquire an immediate, short term tutoring need. Lastly, GUTS also stresses improvement of conversational English skills, helping those international students who want to improve their English fluency. In addition to these programs, GUTS also keeps an Exam file, which contains past math and statistics exams.

Volunteering opportunities

Greater University Tutoring Service appreciates student's volunteer teaching so to help other peer UW-Madison students. Positions include tutoring an academic class that you have taken previously and feel comfortable teaching to fellow students, an academic tutor where you will work with a small group, position at the Drop in tutoring center around campus, or lastly a tutor for the conversational English program so to help better the English fluency of an international student.

If you would like to learn more about becoming a volunteer tutor for GUTS, you can sign up to be a tutor online or simply come to our office at 302A Union South.

Specific Programs offered at GUTS

Academic Match Program

This program is designed specifically for those students that require a more consistent base tutoring. The Academic Program is made so that 2 to 5 classmates are placed within a study group that is led by an experienced tutor. Students within a study group are expected to participate actively both by asking questions to the tutor and helping others in the group. Study groups meet for two hours a week.

Conversational English Program

This program is designed specifically to offer a cross cultural learning opportunity to incoming International students. Tutors in this program are responsible for tutoring International students with respect to language development and educate on survival skills to help adjust them to University life.

The only requirement to be a tutor in this program is to be a native English speaker. GUTS offer a tutoring orientation twice a semester, for those tutors that wish to enrich their tutoring experience.

Drop In Program

This program is designed specifically for those students that require immediate tutoring assistance. This service is open to all students, whether or not they have been as-

signed a tutor through a different program. Assistance is provided to students in courses within major departments, like math, chemistry, physics or computer science, as well as some engineering, business, economics, and foreign languages.

GUTS Info

E-mail

guts@mail.students.wisc.edu

Website

www.guts.studentorg.wisc.edu

Telephone


608-263-5666

Mail

Greater University Tutoring Service
UW-Madison
302A Union South
227 North Randall Ave.
Madison, WI 53715

Study Skills Program

Better study skills can help a student study more effectively resulting in better grades. Greater University Tutoring Service offers study skills counseling on topics including: procrastination, time management, reading, note taking, concentration, exam preparation, test anxiety and test-taking strategies. The GUTS Study Skills program has three types of services. Individual one-hour appointments are the most popular service offered by the Study Skills program. By becoming knowledgeable about various study skills, you can make your study time more productive. Individual appointments are one-to-one meetings with a trained Study Skills specialist. The specialist will cover any area that is of concern to you. Make an appointment by stopping by our office at 302A Union South, or calling the GUTS office at 263-5666 during our regular office hours.

 Toyyab Murtaza

Drop-In Centers

Union South

302A Union South, tables just outside the GUTS office
Sunday, and Wednesday evenings

Lower Franks

Cafeteria in Holt Commons
Sunday evenings

Helen C. White Hall (College Library)

2nd floor center area
Sunday-Wednesday, evenings

Gordon Commons

Room A2, lower level, ARCH
Sunday-Wednesday, evenings

Let the Job Hunt Begin!

It is your freshman year. You do not have to start thinking about getting that first out-of-college-job just yet, do you? The folks who work in the Engineering Career Services (ECS) disagree: the best time to get started is right now.

ECS acts as an intermediate between the students and companies in industry looking to hire college students for engineering work. They also work to help students figure out their career path and develop the skills for a successful job search. By making students well prepared, employers will be happy and come back to hire more.

The ECS office offers many services to aid students in finding the job or career that is right for them. These services include:

- job search workshops
- resume workshops and reviews
- interviewing workshops and mock interviews
- a handbook for cover letters, interview questions, offer evaluation and thank you notes
- WebECS for easy access to company and interview information
- salary statistics
- employer literature
- discussions on workplace issues
- self assessments and values clarifications
- advising on issues for international students
- individual appointments to discuss personal goals and achievement strategies

The knowledgeable ECS staff is willing to answer any questions you might have, no matter how small or large. "There is no silly question," says Susan Piacenza, Associate Director of ECS. "We are here to help."

Something new the ECS office has started is a "Careers in Engineering" series with workshops on topics such as graduate school, law and intellectual property, government jobs, national research labs, technical sales and health care.

As a freshman, one of the best things you can do is to attend the fall Career Con-

nections and the winter Job Connections put on by ECS. In your freshman year at these job fairs, you get a chance to talk with people who work in a field you are interested in to find out what they do. Doing this has two great benefits. The first is that you have the opportunity to find out what it is engineers do after they graduate and it may help you figure out what you want to do when you graduate. The second is that it gives you the

The concepts learned in class come alive as you see them in action on the job

opportunity to start making contacts in industry. Starting your sophomore year, you can use Career Connections and Job Connections to hand out your resume to get interviews for co-ops, internships or full-time positions.

"I went to Career Connections my freshman year and ended up changing my major after finding out what I could do," says senior Marcia Ehle. "My sophomore year I talked with one recruiter for a really long time. And while he was not hiring sophomores, he remembered me and hired me the next year."

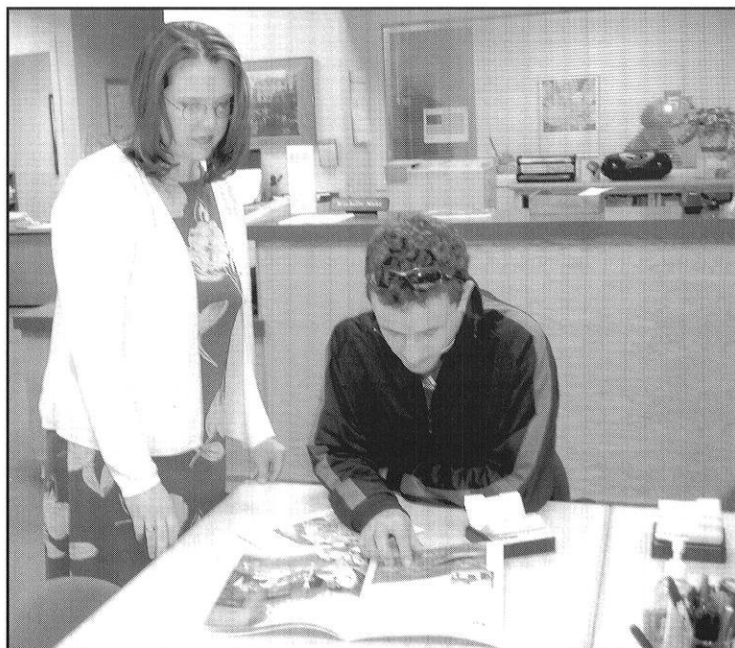
One of the things ECS tries to promote is the value of a co-op or internship experience. Recruiters love to hire students with experience and what is better training than actually doing the job? Not

only will a co-op or internship help you get a job when you graduate, but it will also make the concepts learned in class come alive as you see them in action on the job.

You can register with ECS by attending one of the registration sessions at the beginning of each semester. Watch your email or stop by the ECS office to learn when and where the registration sessions are. The service is free for co-op and intern candidates.

Next year the ECS office will be moving to the new Engineering Centers Building where they will have improved facilities. "Despite our new location, our commitment to serving students will not change," says ECS Director Sandra Arnn. So feel free to stop by and learn about what companies are out there and what they are looking for. By starting your college career with ECS, you can make your job hunting in the future an easier and more successful experience.

 Karen Mandl



Engineering Career Services offers a multitude of services and personal attention for your job search.

Source: Jen Rowland

An EPIC Opportunity for Freshmen

Freshman year can be tough and unexciting with the many prerequisites and general education requirements that are necessary before taking the hands-on classes engineering majors desire. But there is a solution to getting this hands-on experience upon first entering the University. Students who enroll in the Engineering Projects in Community Service (EPICS) program at the University of Wisconsin can get a taste of what engineering is really like even before all of the calculus is out of the way.

Learn through experience that there are no real answers, but many available solutions

EPICS is a program in which teams of students work with a community service agency on long-term engineering projects. The purpose of these projects is to use engineering design to solve the technology needs of the client, giving students the opportunity to serve their community in the process.

EPICS began at Purdue University in 1995 as an effort to provide students an opportunity to apply their knowledge in a way that serves the community and in which student teams could design projects and follow through with them over multiple semesters. Team members ranged from freshmen to seniors in level, so as seniors graduated, younger students had the chance to carry on projects and take on leadership roles. The program at Purdue has caught on and UW-Madison, along with seven other universities, has developed an EPICS program as part of the curriculum offered in the College of Engineering.

As a freshman, there are endless rewards and benefits in becoming involved with EPICS. It provides not only a temporary change from the ordinary lectures, but also exciting opportunities to collaborate with agencies,

network with other engineering students of all levels and gain practical experience in the engineering field through vital community service projects.

The practical, realistic experience gained through EPICS is important for students in gaining the professional development that employers seek. EPICS gives students the ability to learn about professional communication and to achieve success in the workplace, which assists in getting internships, entry level employment, and admissions to graduate school.

In addition, EPICS is a practical way for freshmen to gain leadership experience. Incoming freshmen can give projects-in-progress new creative ideas and a new perspective and direction as to where it is going. Moreover, students enrolling for multiple semesters of EPICS, gain responsibility as they pass on their knowledge of the ongoing projects. Students enrollment for multiple semesters of EPICS is essential to the program as those students take on the leadership roles in the projects.

In past semesters, EPICS has seen students gain relationships and rapport with community agencies while designing and following through with engineering centered projects. While students work on projects, they learn through experience that there are no real answers, but many available solutions to the tasks they encounter.

One example of an EPICS project is titled "Moo-v-ability." Through the Moo-v-ability project, students designed and implemented modifications for wheelchairs, bicycles, fishing rods and page-turners for individuals in the community who have movement disabilities.

Freshmen who enroll in EPICS and continue with the program throughout their college career receive priceless educational experience through hands-on projects and teamwork and leadership, while also receiving credit toward their college degree. For information and to enroll in EPICS, visit their homepage at <http://epics.engr.wisc.edu>.

 Lizabeth Wyma



Current EPICS Projects at the University of Wisconsin

Moo-v-ability
Frank Fronczak

Voice Improvement
Willis Tompkins

Rehabilitation Medicine
Jay Martin

Biofeedback/stress Management
John Webster

Coordinating Leadership Opportunities Information System
Fred Bradley, Traci Kelly

Habitat for Humanity
John Mitchell

Campus Sustainability
Fred Bradley, Traci Kelly

Madison Homelessness Prevention
Fred Bradley, Traci Kelly

South Metropolitan Planning Council
Fred Bradley, Traci Kelly

Task Force on Money, Education, and Prisons, Inc.
Fred Bradley, Traci Kelly

College of Engineering

EVENTS!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
E	V	E	N	T	S	!

Polygon is one the largest engineering student organizations on campus. It is an integral part of the College of Engineering and is responsible for a lot of the events that take place on campus. Polygon, along with the College of Engineering and other students groups, work together every year on social events, like the Pre-engineering Bash, E-Week, the Spring Banquet, the SWE Engineering Formal and other fun events like the "Battle of the Bands." Here is a quick rundown on some of the largest and most important events held every year.

Pre-Engineering Bash

Pre-engineering Bash is one of the most important social events on the engineering campus. It takes place every year one week before classes start. The Bash's main focus is to acquaint freshman to the engineering campus and let freshmen socialize with one another. Engineering faculty is invited to this event, and past attendees have included Pre-Engineering advisers such as Don Woolston, Bonnie Schmidt, among others. Engineering student organizations are also invited and have the opportunity to present themselves to the new students. The event also features free food!

E-week

E-week, also known as Engineering Pride Week, is held during the spring of each year

and lasts for about a week. Its main focus is to promote the formation of student teams to participate in the games and contests. Games like E-Weekopoly, the tug-o'-war, the pie eating competition, the egg drop competition and the blood drive have been part of E-Week in the past, along with events incorporating modern technology, such as the computer and video game racing competition. This event is full of fun and games, and students have a ball of a time.

Polygon Spring Banquet

Polygon Spring Banquet is one of the most prestigious events on the engineering campus. The banquet is held to reward outstanding students and present awards for the various writing competitions held every year.

Engineering Formal

Engineering Formal occurs every year in winter under the supervision of the Society of Women Engineers. With people wearing the best of suits and dresses, this is one event that no one should miss. It features a DJ, hors d'oeuvres, a bar (for upper-classmen with valid ID) and plenty of opportunity for dancing, pictures and fun.


Battle of the Bands

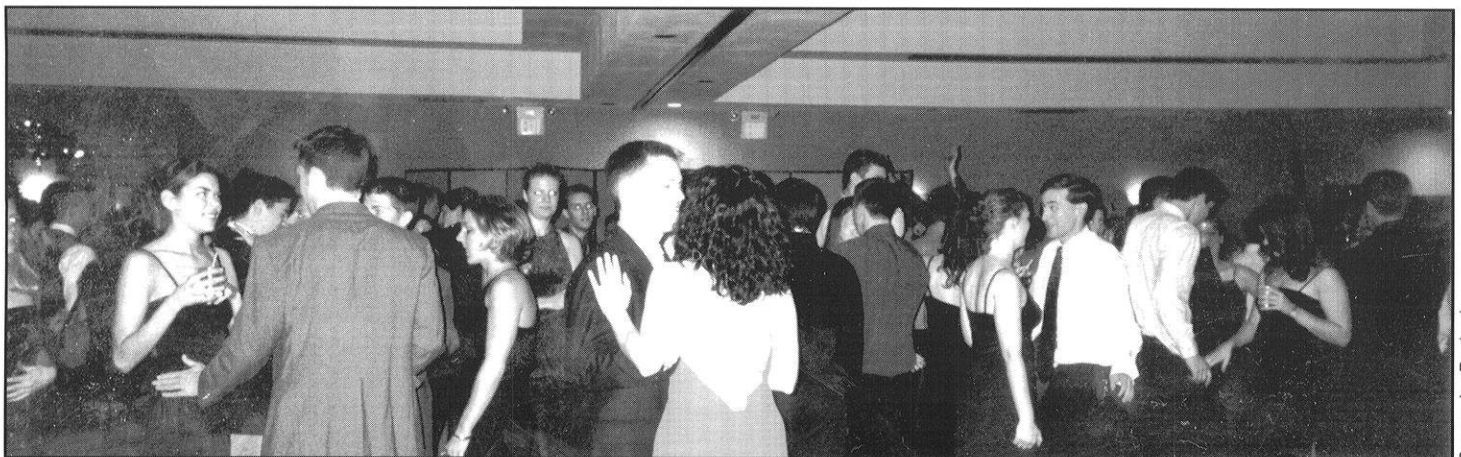
Battle of the Bands is one of the most entertaining events on engineering campus. It involves music, dancing and is held on the

Engineering Lawn during the spring of each year around May 1st. Blasting music, free food and sunshine all combine to make this a very popular event, routinely drawing upwards of 400 students at any one time, and thousands during the day long event period. With all the different student bands playing so well, the competition is usually quite heated, and the selection of a winner is always difficult for the judges. If you are a musician, you might even want to throw your hat in the ring and give it a try!

Career Connection and Job Fair

Career Connection and Job Fair are held in September and February, respectively, and are put on by the College of Engineering through Engineering Career Services in conjunction with Polygon. These events are very important to engineering students, because it is at these events that you are most likely to find internships, co-ops and jobs! Various companies are invited to the campus to accept résumés and interview students they may wish to employ at their company. The 4 day events attract around 200 employers and students are welcome to come and speak to them at any time during the day. Most companies also offer informational pamphlets and displays as well as a chance to speak with real employees and managers.

 Toyab Murtaza



Engineers and non-engineers alike enjoying the SWE Engineering Formal.

How to MAke the GrAde on Homework

Along with meeting new people and getting involved on campus, you will also have to spend many hours doing homework. Homework is a very important part of a successful educational career in the College of Engineering. The best way to approach homework as a freshman is to realize that it will be tougher than high school and will take many hours of your college career here at UW-Madison. Don't be afraid though, because there are many steps you can take to stay ahead of the game and succeed.

★ Take good notes and review them often

By taking good notes and listening carefully in lecture, you will be more likely to understand the material and can take in a lot of information. If you review your notes after each class, you can make sure everything is clear and to help re-enforce the information in your memory.

★ Read and study the textbook

In most cases the textbook can be a very helpful supplement in understanding what your professors have said. Even more importantly, textbooks can help you to understand important terminology that your professor will use throughout the course.

★ Work in groups

Forming a study group with class members can be extremely helpful in understanding class material. If you don't understand a concept, it is very likely that a peer in your class does, or vice versa. Try to find peers that you can work with productively and socialize with as well.

★ Find a place where you study well


Your study environment affects your studying. The dorms usually are not the best places to study because there are so many friends around to easily distract you. It might take a while to find a place that best suits your studying style; try some of the popular places on the Engineering campus, such as Wendt Library or Union South.

★ Start homework and studying early

Don't get caught up in the habit of procrastination. It is very easy to do, but the earlier you start studying, the more information you will retain (and the less painful it will be to recover). By starting assignments and studying early, you will also have a better chance of contacting your professor or teaching assistant with any questions that might arise.

★ Take an occasional break

Studying for hours on end can easily wear you out. By taking small breaks to stretch or get a snack, you will be able to stay alert and be more productive. Just make sure you will be able to get back to work. Note: Watching television or chatting on-line or on the telephone is usually a bad idea for a study break.

 Lizabeth Wyma

**Still struggling even after using these tips?
Just want a little bit of extra help?**

For information on tutoring services, see
Greater University Tutoring Services on page 11.



Kurt F. Wendt Library offers a quiet and cool environment as well as team areas for group projects.

Source: Jen Rowland


EPD 160

Introduction to Engineering

EPD 160 is an introductory engineering course that is open to freshman and is offered in the fall of each year. This three credit class provides incoming freshman a chance to "get their hands dirty" on a real engineering project. Each project in EPD160 takes the entire semester to complete and is established

of Engineering. Each project attempts to involve elements from a variety of engineering disciplines so that pre-engineers can get a feel for what the various disciplines study and create. This hopefully allows students to make a better decision when they have to choose a major during late Freshman or early Sophomore year.

EPD160 is a great course to take to get some hands on experience, and it is an easy way to find out what engineering discipline excites you the most. For these reasons alone, pre-engineers should consider registering for it their first semester, not to mention the fun they can have in the process!

 Toyyab Murtaza

EPD160 is a great course to take to get some hands on experience

in conjunction with a real client. The class also stresses team-based learning and work in a variety of engineering professions. Finally, the course teaches students computer and lab basics that they will find useful in further courses at the College of Engineering.

EPD160 focuses on project design, and the topics that are covered during the semester are:

- Brainstorming
- Evaluation of design ideas
- Introduction to engineering design processes
- Elements of engineering analysis (depending on the project)
- Prototyping of designs, including testing and modifications
- Teamwork and team dynamics
- An overview of the departments and majors in the College of Engineering

The engineering design phase is perhaps the most important part of the course. This phase includes evaluation of design factors as diverse as economics, environmental considerations, ethics, health and safety, manufacturability and impact on society. These elements are then considered in relation to the project at hand.

Also important is the overview of the departments and majors in the College

Explore:

www.engr.wisc.edu/epd



President's Award Winning Hotel

- Complimentary Parking
- Indoor Pool/Whirlpool
- Plaza Cafe/Lounge
- Hair dryers, coffee makers, irons/ironing boards in all guest rooms
- Transportation to Airport, UW Campus and Monona Terrace
- One block to the Kohl Center

Howard Johnson Plaza-Hotel
525 West Johnson Street
Madison, WI 53703
608-251-5511

It's So BIG

How to Fit In on Campus

As an incoming freshman, the UW-Madison campus can seem huge, especially if you do not know any other students that attend school here. Getting to know the people you will be around on campus is the best way to feel comfortable with your new environment – UW-Madison. The people you will interact with will range from peers to advisers to professors and you will want to make sure that you feel comfortable communicating with them on a regular basis, as it will be necessary for the next few years.

First of all, meeting new people can be scary, but it is a lot of fun too. Get to know your roommate and others in your dorm. Great friendships stem from dorm life and friends are a crucial part to having fun at UW-Madison and keeping you from stressing out too much from your tough classes.

A great way to meet peers that you will see on the engineering campus is to start off by attending the kick-off meetings for some of the engineering student organizations. Look for organizations that fit in to your area of study and that you have a genuine interest in. As a freshman, becoming a member in an organization will help you meet other students that will be in your classes, get a taste of your engineering area of interest and gain leadership roles as upper-classmen with long term membership in the organization.

Make sure you become involved in the classroom as well. Being active in class will not only help you fit in among your fellow students, but professors and teaching assistants will also take notice of you. It can be difficult to get the awareness from your professors and teaching assistants in large lecture courses, so make sure to stop by office hours

so you can get to know them and they can get to know you as well. This will help you communicate better so that if you do have any problems or concerns with the course, you will be able to raise these issues with your professor/TA.

Another very important person to keep in contact with is your adviser. Meeting with your adviser on a regular basis is essential in making sure that you take the correct courses and are on the right track to reach your goals and graduate.

It may seem like you are lost among the unfamiliar swarms of students, professors and faculty for the first few weeks, but after that, you probably won't be able to leave your room without running into a handful of people you know.

 Lizabeth Wyma

The First Year Transition

The first year of college at any institution is an interesting period. All at once a student is granted unprecedented independence from his or her parents, freedom to make both mundane and vitally important choices, treatment as an adult amongst peers and liberty to choose what to learn and when to do it. With all this freedom comes a share of responsibility: your choices affect your life, and the normal safety nets are either reduced or removed altogether.

It is important, therefore, to make correct choices, and the way to do this is to make informed decisions: do a decent amount of research and soul-searching before committing oneself to any course of action. This is not to say, for example, you should carefully weigh and study the calorie content of Food Service pizzas every evening before dinner, but it is important, in general, to have a healthy diet and eat fruits and vegetables (occasionally). A very important decision, and one that

should be on every pre-engineers mind, is what major to choose.

The first year of college is a period of transition. It is a period where you move from the general education you have received in high school, take a few advanced general classes (such as chemistry, calculus and physics) and move into a degree program. As a student, you have approximately one year to decide that engineering is right for you and to pick a field to study and earn a degree. It is, therefore, important to acquire a fair bit of information about the many fields offered here at UW-Madison and to do some "field research" and experience your desired degree before you commit to it.

"Field research" can take many forms. Student organizations offer a great deal of information about majors, and there is an organization for almost every major offered at the College of Engineering. The greatest strength of these organizations

are their student members. Upperclassmen can show and tell you all about any major at the University. A variety of courses offered by the COE, such as the EPICS program and EPD160 also offer a great deal of information about other majors and experience working on real engineering projects. Many student organizations and the EPICS and EPD160 programs are covered in the pages of this magazine.

The root message today is that your first year at college is a time to groom yourself and find a career path. You must transition from being a teenager to an adult, and at the same time from a student to an undergraduate. Look into and experience all the majors this college has to offer and find one that suits you. In fifty years, after a long and productive career, you will thank yourself for it.

 Nicholas Mueller

Engineering Campus Buildings

Engineering Hall (EH)

Engineering Hall is the centerpiece of the Engineering Campus. This large building is home to many pre-engineering classes, pre-engineering Advising, College of Engineering Administration, and of course a host of engineering majors. It is likely to be the center of the engineer's day after freshman year. EH stays open relatively late, and its main lobby is a good place to study during breaks in the school day. Several CAE remote access points are also scattered through the building.

Engineering Research Building (ERB)

The ERB tower plays host to a wide variety of upper-level courses as well as research laboratories. It is the domain of graduate students and professors, though the occasional course is offered inside its (ivory) walls. ERB is a place a pre-engineer might get a student lab job or seek out a professor or graduate student for help with complex upper level work.

Mechanical Engineering (ME)

Mechanical Engineering is the home of Mechanical Engineers and Industrial Engineers. The main lobby of the building is a great study spot, especially for MEs and IEs. The building stays open late and features a CAE remote access point and a snack room with an excellent selection.

Materials Science and Engineering (MSE)

MSE is home to Materials Science majors, and features quite a bit of high technology, including several electron microscopes. It has several medium sized lecture halls and a CAE remote access point on the second story. MSE majors spend the great majority of their time here, both in class and doing schoolwork at night.

Engineering Centers Building (ECB)

ECB will be completed in Fall 2002. It will be home to all Engineering Student Organizations as well as the Technical Communication Program and other College of Engineering components such as ECS. ECB is likely to be a hot study spot. See the article "Coming Soon In Fall 2002..." for more information about ECB.

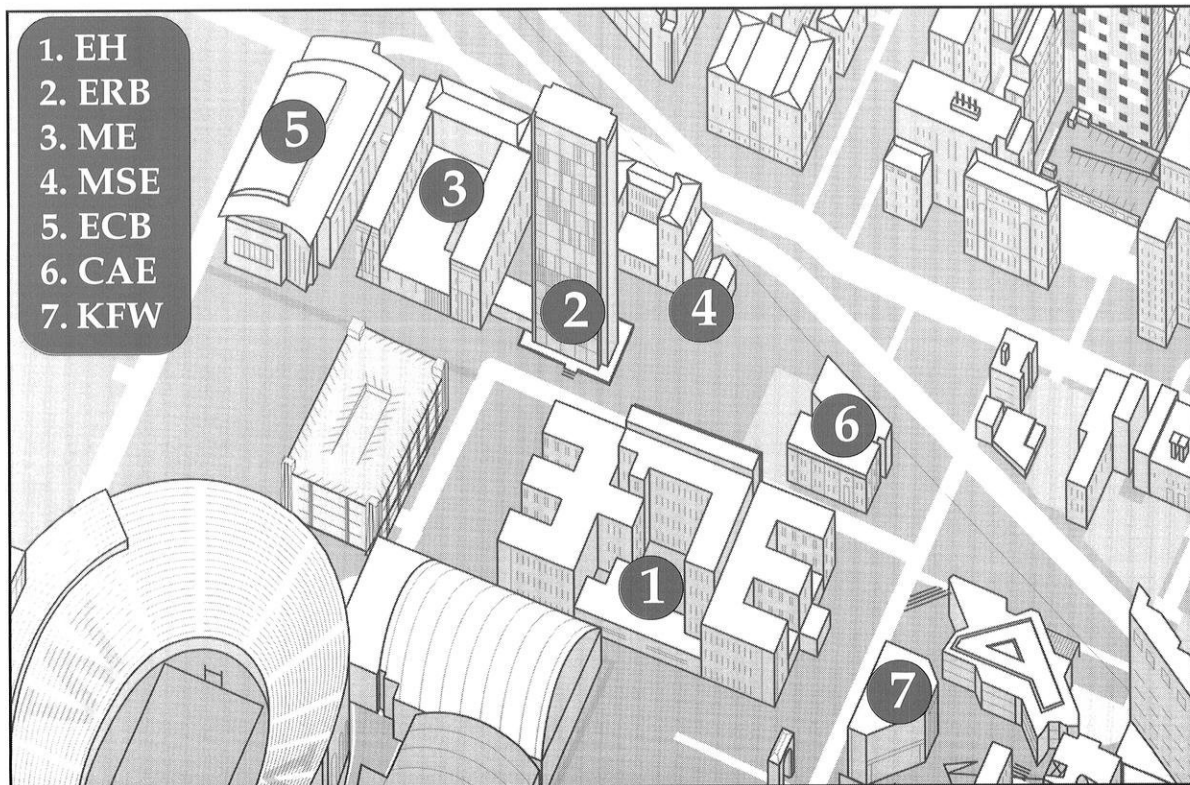
Computer Aided Engineering (CAE)

CAE is a second home for some engineering students. All the software programs an engineering student needs are available on the CAE computers, along with easy access to the Internet, E-mail and printing. It is a good place to spin your wheels between classes. See the article "Computer Aided Engineering: A Quick Primer" for more information.

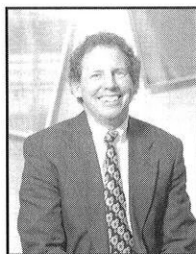
Kurt F. Wendt Library (KFW)

Wendt Library is the ultimate study spot for engineering students. Every night the building is packed to the rafters with students of all engineering majors, chatting, eating and doing homework. This atmosphere makes it easy to get some work done, have a good time and get help if you need it from upperclassmen. Wendt also houses thousands of reference books and periodicals on engineering subjects.

Nicholas Mueller



Interview Time!



Don C. Woolston



Eman Zaki



Bonnie Schmidt

Wisconsin Engineer: Who are you? Give us a sentence or three about yourself.

Don C. Woolston: I am a long-time citizen of the engineering campus, with a background in both research and teaching. I am active in state and national academic advising organizations, and work hard to get to know as many students possible.

Eman Zaki: I am originally from Baghdad, Iraq, and graduated in Civil Engineering from the University of Baghdad. I came to the US in 1986, to the UW in 1996, and now teach EPD 101, advise students and work with incoming students during SOAR.

Bonnie Schmidt: I started with an English background and originally worked for the UW teaching EPD 101 and EPD 397. From there, I came to work as an adviser and the tutoring program coordinator for the College of Engineering.

WE: What is one situation that you think a freshman should come to you for assistance for?

DCW: Every freshman should go to his or her adviser and just state short and long term goals, just for some reinforcement and feedback.

EZ: Well first I'd like to make the point that Freshmen are welcome to drop in any time, and indeed we encourage you to. You should think about coming in at the beginning of the semester to introduce yourself and to discuss your first semester here at the CoE. We can also help you adjust to the college experience, and to talk about your courses, getting into a degree program, and even to talk about engineering itself, even if you have doubts.

BS: Ditto Eman's comments. We are very interested in your progress and helping you reach your goals here at UW. We are resource people really, and we can help you find whatever you may need on campus.

WE: Closing thought?

DCW: The whole point of college is to embrace change. You aren't getting your money's

worth unless you are gaining new skills and abilities. And we're not big on anonymity here: it really helps if students work actively to make lots of contacts with professors, teaching assistants, and other students. You might as well jump in with both feet!

BS: You are about to embark on an exciting year. We hope for you to succeed, and we are here to help you attain success. It may be a big campus, but there are many good

and helpful people out there to assist you on your way, and we are some of them.

EZ: I have two things. You must learn a valuable thing as a freshman: You have now achieved a great deal of independence, but you must learn to be responsible. You should also read your e-mails from your advisers!

WE: Nicholas Mueller

Interview with a UW Freshman

Wisconsin Engineer: Who are you?

Julia: Hi, my name is Julia Rose Bickler. I was born and raised in Milwaukee, WI. I am a freshman at the University and am interested in majoring in Spanish and Industrial Engineering. I am the youngest of a family of five with an older brother and sister. I enjoy hanging out with my friends, being active, and keeping myself busy with all that I am involved.

WE: What is the organization from which you hail?

Julia: I am doing this interview through Society of Women Engineers, but I also am involved in Institute of Industrial Engineers, Society of Manufacturing Engineers, Polygon Student Engineering Council, and Women in Science and Engineering Intern.

WE: What is it like being a member?

Julia: I love being a member of SWE. They provide awesome opportunities of which I can partake in. The friendships I gain are priceless. I attend different meeting for events that grab my interest such as community service, a mentoring program for Girl Scouts, planning Day on Campus, or Engineering Tomorrow's Career Camp, and many other events.

WE: How much time did you have to commit?

Julia: I commit two to four hours a week. This is more than usual SWE members, but I am a co-chair for Regionals. This means that Hillary [another SWE member] and I plan regionals in 2004 for the SWE Region H hoping they will stay in Madison.

WE: Did you enjoy yourself and/or become a part of the community?

Julia: SWE does many things to become part of the community. They host community service events such as cleaning at the Ronald McDonald house, or trick or treat for can goods. Also, they provide tutoring programs for local school kids.

WE: Would you suggest anything to an incoming freshman?

Julia: Get involved!! There are limitless organizations to get involved in and it is so worth it! The free food, the friendships, the knowledge of the campus, and the help you receive with classes. Also, think of what you can put on your resume :)

WE: Any closing thoughts?

Julia: All I can say is I love SWE and hope the clubs I am involved in (Polygon, SME, WISE, IIE) will continue to get notice for what they do!



You Know You're an Engineer When...

...it comes naturally to describe something as having a "high velocity,"
a low coefficient of friction," or a "strong centripetal force"

...you know everyone on the fourth floor of Wendt Library.

...you feel comfortable wearing two different kinds of plaid to class

...you feel comfortable wearing two different kinds of plaid to class for two or more days in a row

...when something breaks, you say the material "failed"

...you know what ECS, MS&E, ME, ECB, CAE, and ERB stand for

...you can't remember the last time you used a set of directions to put something together

...you use binary to keep score while playing a game

...you think that just because it is not broken, does not mean it cannot be fixed

...you spend more time at CAE than you do sleeping

...sunlight begins to stun and confuse you

useful websites & contact numbers

COE department homepages

Biomedical Engineering <http://www.engr.wisc.edu/bme/>
Chemical Engineering <http://www.engr.wisc.edu/che/>
Civil and Environmental Engineering <http://www.engr.wisc.edu/cee/>
Electrical and Computer Engineering <http://www.engr.wisc.edu/ece/>
Engineering Mechanics and Astronautics <http://www.engr.wisc.edu/ep/ema/>
Engineering Professional Development <http://www.engr.wisc.edu/epd/>
Geological Engineering <http://www.engr.wisc.edu/interd/gep/>
Industrial Engineering <http://www.engr.wisc.edu/ie/>
Materials Science and Engineering <http://www.engr.wisc.edu/mse/>
Mechanical Engineering <http://www.engr.wisc.edu/me/>
Nuclear Engineering and Engineering Physics <http://www.engr.wisc.edu/ep/neep/>

counseling & health services

Website <http://www.uhs.wisc.edu>
Telephone 608.265.8200
Clinic Hours 8:30 am–5 pm weekdays except 9 am–5 pm Wednesday
Office Hours 5 - 9 pm weekdays, noon - 9 pm weekends & holidays
Crisis Intervention Services (personal crises, traumatic situations, & campus emergencies)
During Clinic Hours 608.265.5600
During Non-Clinic Hours 608.265.6565

advising services

Career Counseling

Engineering Career Services
Office 1150 Engineering Hall
Telephone 608.262.3471

Pre - Engineering

Office 2640 Engineering Hall
Hours 8 am - noon, 1 - 4:30 pm weekdays
Telephone 608.262.2473
E-mail egradvisor@engr.wisc.edu

campus assistance

Address 1st Floor Red Gym, 716 Langdon Street, Madison, WI 53706
Hours 8 am - 6 pm weekdays, 10 am - 3 pm Saturday, 11 am - 3 pm Sunday
Telephone 608.263.2400
E-mail askbucky@redgym.wisc.edu

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