

Industrial Blueprint

-The IOE Student Newsletter-

Volume 19, Issue No. 5

A joint venture from APM and IIE

January 2006

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A Few Words From the Editor . . .

The start of a new semester can only mean one thing ... a brand spankin' new issue of the *Industrial Blueprint*! Who's excited? I sure am!

I still cannot believe that the start of the Winter '06 term is already here. I'm sure the abnormally warm weather we've been having can be partly to blame. Going out on a January night in Michigan sans a winter coat would normally be synonymous with frostbite and/or hypothermia. Not this winter!

The recent change in weather goes along great with this year's new additions to the Blueprint format, such as the introduction of entertainment reviews! Where else can you find good IOE classes to take along with learning a bit about the latest in music, movies, video games, etc.? Yeah I know, this makes us about 50 times more awesome than before.

In this issue, along with entertainment coverage (be sure to check out my review of Annie's Ani-mal) you will find helpful course reviews, informative senior spotlights, a great article on how to on secure a job/internship, and more.

If you would like to contribute an article, give feedback or provide artwork to help aid us in our quest of combating blank space, please feel free to contact us via email at:

IOEBlueprintGroup@umich.edu

—Jevon Reynolds, Co-editor

Upcoming Events

January 29	Chinese New Year
February	Black History Month
February 2	Engineering Co-op & Internship Fair
February 14	Valentine's Day

Visit the IOE Department Website:
<http://ioe.engin.umich.edu/degrees/ugrad/ugrad.html>

IOE Student Societies

Alpha Pi Mu (APM)

<http://www.engin.umich.edu/soc/apm>

Engineering Global Leadership (EGL) Honor Society

<http://www.engin.umich.edu/students/support/egl/>

Human Factors and Ergonomics Society (HFES)

<http://www.engin.umich.edu/soc/hfes>

Institute of Industrial Engineers (IIE)

<http://www.engin.umich.edu/soc/iie>

Institute for Operations Research & the Management Sciences

<http://www.engin.umich.edu/soc/informs>

Outstanding Multicultural Industrial Engineers (OMIE)

<http://www.engin.umich.edu/soc/omie/>



The IOE Building

Why, if you check a periodic table of elements, can you not find atomic masses for elements with atomic numbers > 92?

Starting Off

By Minjie Yu

Writing an article about preparing for school can never be exciting can it? I am definitely not an expert nor am I an ace student (disclaimer). However, I'll try my best to make this as good of a read as possible. It would definitely sound cliché, but the basic idea behind doing well in school will always be the same whether you like it or not. No amount of sugar coating can make diligence sound fun and interesting.

As the term has just kicked-off, it would probably still be a good time to re-consider if the courses you are taking intrigues you. Having attended the first few weeks, you should be able to gauge pretty well if you are interested in the material. If the class is a core requirement then I think you haven't got a choice. But if you truly dislike the required courses then you might be in the wrong place. Hah... if you are still reading this article, it is probably a safe bet to say that you are more or less "into" IOE. Thus, how should you tackle the challenges of school? I think it boils down to what motivates you as a person and to figure out what works best for you.

Like I said above, the fundamentals will always be consistency and time management. Unless you are a genius (which in that case you should not be reading this article), there are no short-cuts! Attempting to go classes on a regular basis is a good start. Having said that, please try to put that crossword puzzle away! Comprehending the gist of the class from lecture can be tremendously useful. Clarify your doubts as soon as possible and you would find revising and working through your homework a much smoother ride. If you need further assistance, office hours can be of immense help. The bottom line would be your personal drive and hunger for success. "To each his own"... work at the pace you are most comfortable in and manage your time as best as you can. Competition is inevitable and omni-present; it is good to let that be an external motivator. However, it should not stifle your self-confidence and each of us should strive for our personal goals and just keep working towards it. As long as you have tried your best, don't waste your time crying over spilt milk.

I hope this helps and that all of us have a fun term ahead. Having read this article, please keep in mind that there's more to college than just school!



Getting Your Foot in the Door

A guide to securing an internship or a job
By Alexander Johnson

Time is running out, and many of you may not have started preparing for the gauntlet, otherwise known as the Winter Co-op and Internship Fair. Well, have no fear; this is a guide of sorts to help you secure those interviews. Some of you may be looking for an internship or a co-op, while some of you may be looking for full time...regardless, these tips will help you out. And yes, even though it is called the Co-op and Internship Fair, there are still employers there looking for full time positions as well.

The first step is making sure your resume is in order. This is your "ticket to the next round". Make sure it is in tip top shape. Check your fonts; make sure you don't have 10 million font sizes and types all over it.

(continued on page 6)

Accounting 471 Review

By Hsin Yi Chai

It may be too early to think about what courses to take for next semester. However, there is certainly no harm reading course reviews at the beginning of the semester. So, take a look at my review, you might be interested in taking this course in the coming semester.

Do you know that you can take up to 6 credits outside IOE department (B-school, other engineering departments, LSA, etc) to fulfill IOE technical electives? If you would like to try a business course, Accounting 471 is a good option. This course is designed to provide non-business students (FYI: ACC 271 and ACC 272 are tailored for business students) with an overview of financial accounting and to develop understanding of the basic financial statements produced by companies. Before taking this course, I thought I would learn about preparing T-accounts and journal entries. This was not the case. The emphasis was put on understanding the financial statements instead of learning how accounting works. Ultimately, this course gives insight into the activities that are hidden behind the “well prepared” financial reports. Don’t you think it is cool to know about what is happening in a company by simply analyzing its balance sheets, cash flows statements and profit and lost statements? I found this to be very impressive. In my opinion, this course is useful for industrial engineers as there is some probability that we will deal with financial decision making in the future. This is also our advantage as compared to other engineers because we know something about the dollar sign!

I took ACC 471 in fall 2005 under Jefferson Williams. He is a nice instructor. He is very knowledgeable in accounting. How about the workload? I had homework due every class. Yes, every class. But the good news is we went through most of the homework in class before submitting it. I strongly advise you to make some efforts to do it on your own because it really helps to do well in the course. Each homework assignment took about an hour to complete. I really enjoyed this class and I hope you will too!



Memoirs of a Geisha Review

By Linda Huang

Arthur Golden's 1997 best-selling book, *Memoirs of a Geisha*, has been created into a gorgeous film by director Rob Marshall. Sayuri, a geisha (a Japanese woman trained to entertain men with conversation and singing and dancing) that was renown in Japan pre-WWII, wows the audience by sweeping them into the beauty of a secret world made of beautifully patterned silk kimonos and eyes as blue as water.

Memoirs of a Geisha tells an enchanting story of a young girl named Chiyo who, after being sold into servitude as a child, finds her motivation to become a beautiful Geisha in a kind hearted man known as the Chairman. Young Chiyo, at the age of 15, later to be renamed Sayuri, becomes the protégée of her “older sister” Mameha. This sparks the jealousy of Mameha's chief rival, Hatsumomo. Sayuri must learn the art of music, conversation, dance, tea, and much more in mere months, in order to wow her patrons as they bid for her virginity. Sayuri withstands the continued undermining of Hatsumomo, with her goal being to get close to the Chairman, even as his business partner, Nobu, falls in love with her.

The film reveals a world of ultra-refined women who are neither prostitutes nor wives, but are rather living works of art; women who see no viable options in life other than this strange, competitive sisterhood.



Syriana Review

By George Hart

Syriana, the most publicized work of Stephen Gaghan since 2000's *Traffic*, takes on a lot in its rendering of the novel *See No Evil*, by Robert Baer. *Syriana* is a twisting political thriller describing the tangled interactions and relationships surrounding our most precious commodity, oil. In addressing this obviously complex subject matter, Gaghan appropriately takes several approaches. Like *Traffic*, *Syriana*'s plot has many threads, following seemingly independent stories all over the world, only to have them ultimately meet, demonstrating their intrinsically close ties.



In fact, the movie has at least 4 subplots. The first involves Bob Barnes (George Clooney), a CIA agent past his prime. Most comfortable in the gritty streets of Beirut, Barnes seems to have become a risk to the CIA, and mysteriously finds himself defenseless in the hands of his enemies. The second revolves around a profit obsessed energy trader, Bryan Woodman (Matt Damon). After tumultuous events, Woodman concentrates his efforts on helping a liberal emir, Prince Nasir Al-Subaii (Alexander Siddig) try to develop a sustainable economy and free culture in his gulf state. The third storyline, centered on a young lawyer, Bennet Holiday (Jeffery Wright), investigates the merger of two international oil giants. Finally, there is Wasim Khan (Mahzar Munir), a young Pakistani worker drawn to the Persian Gulf by the promise of work, faces the harsh realities and uncertainties inherent in his job, and is ideologically wooed by a radical Islamic leader, Mohammed Sheik Agiza (Amr Waked).

Syriana certainly succeeds in convincing audiences of the complexity of the issues surrounding oil, perhaps to a fault. The movie requires unwavering attention in order to catch the subtle details and plot twists. Also helpful is a thorough understanding of the recent history of the Middle East. Even a knowledgeable person who watches the film closely, however, will be left asking questions. There are definite gaps in the storyline, or at least, important explanations are left out.

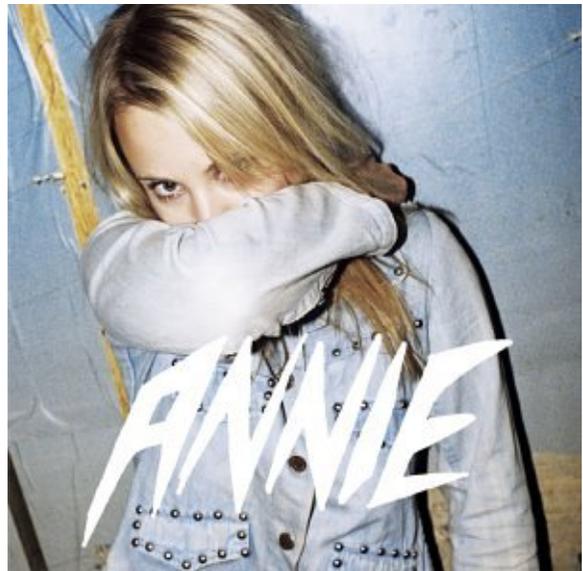
While not as successful as *Traffic*, *Syriana* provides an excellent and accurate snapshot of current oil-related issues both in the Middle East and elsewhere in the world. The film demonstrates the dramatic influence and impact that foreign countries and companies have on the Middle East. It sheds light on the intrigue and corruption within corporations and government agencies, and attempts to portray the ongoing ideological struggle between all interested groups, both those internal and external to the region.

Annie: Anniemal Review

Rating : 5/5

By Jevon Reynolds

Sick and tired of completely vacuous, generic pop music that's constantly heard on TV or the radio? I sure know that I am. That's one reason why I am so happy to have discovered Annie, a talented Norwegian DJ turned electronic-pop songstress. Finally, another rare artist who understands what makes good pop: catchy music with style and most importantly, a bit of substance underneath. To get a feel for what I'm saying, just listen to "Heartbeat," one of her hit-singles of last year that was considered by a pitchforkmedia.com editor as 'arguably the best song of the year.' While the excitement of a new crush is undoubtedly cliché subject matter for a song, the infectious chorus and minimal yet lush production done by Annie herself manages to breathe new life into a once stale arena. Moreover, peeling back the outer layers of the song, you can also hear sadness and vulnerability – emotions that bring a surprising sense of sincerity and depth to the material. It's Anniemal's seamless mix of excitement, coolness and underlying realism that make it a gem of a CD and definitely one of my top picks of 2005. If you haven't heard of Annie prior to reading this review, go check it out and thank me later.



IOE Common Room: Uncommonly Great

By Bill Muscat

It's just a small room near the entrance to the IOE Department, but the IOE common room is one that's special in the hearts of IOE students and staff alike. On any given day, you can find undergraduate students, doctoral candidates and professors reading the newspaper and enjoying a cup of java between classes.

It's a place where someone who has just failed an exam can drink a cup of coffee next to the professor whose test he or she just took. The atmosphere is perfect to have a multilateral, in-depth debate with your GSI and your professor on just how awful the Lions really are, how much cooler IOE's are than the rest of the College of Engineering, or what ergonomic applications a recent internship required.

It's a spot where one can sit and enjoy the lounge atmosphere with the newspapers and coffee, or a place where one can study at the tables on the opposite end of the common room. There is always a seat available, whether you read the sports page, the comics, the Wall Street Journal, the Industrial Engineering publications, or you read that excellent student publication, the Blueprint.

It's the fresh coffee aroma in the air, because despite all of her other responsibilities concerning the IOE department, Academic Secretary Tina Blay still finds time to brew up a fresh pot. In recognition for all she does for the IOE department, Tina just recently won the College of Engineering Excellence in Staff Service Award for 2005. While it's commonly known by students that the real value of free food is priceless, you never know when Tina might set out free food for the taking. Several cloudy days have been brightened by the prospect of free donuts or bagels that just so happen to go perfectly with the coffee.

It's entertaining as well. I've found that just sitting in the common room and people watching is a great way to spend that odd hour between classes. It is fun to watch people that otherwise write the books for the classes you're taking, battle it out with students for microwave time to warm a hot pocket.

For a department that is ranked second in the nation as Industrial specialties are concerned, the common room is number one in my book. Just remember to drop your change in the coffee fund for each cup!

The Answers to Life's Important Questions in < 100 Words

By Steven Agacinski — Let's Be Friends

Many nights have been completely deprived of sleep as I have grappled with the question "What is the dot above the letter *i* called?" At long last, that answer has been unearthed for me. The dot above the letter *i* is called the "tittle", which comes from the Middle English word "*titi*", derived from the medieval Latin word "*titulus*", meaning "diacritical mark" from the Latin "title" or "superscription". Whew! That's a load off my mind. Thanks to *The American Heritage Dictionary of the English Language, Fourth Edition, Copyright 2000 by Houghton Mifflin Company* for the assist on this one.

No, I can't also call it an "umlaut"



Door

(continued from page 2)

Make sure there are NO typos or grammatical errors. Those are sure fire ways to get you kicked off the candidate list. Don't worry about going to 5 different people to get your resume critiqued because they are all going to say different things... you can make all the changes one person suggests, then take it to a new person, and they will suggest even more changes. Just go to one credible source, such as the Engineering Career Resource Center (ECRC), and you'll be fine.

Next, figure out what it is you want. Internship, Co-op, full-time, in state, out of state, etc., this will help you trim the list of prospective companies. Go to the ECRC website and print out a copy of the companies that are coming to the fair, or at least take a look at which ones fit your criteria. Write down the names of the companies and their locations. For those of you who have never been to a career fair, learning to navigate them can be a rather daunting task. It would be very helpful for you to know ahead of time where each company is located on the floor so you can plan a "path of success." It's kind of like going to the grocery store; get everything you need from one aisle before moving on to the next. This will also help in the event that there is a long line at one of the company booths in which you are interested, because you can just check on another company booth in the same vicinity that may have a shorter line. Timing is everything when it comes to getting yourself in front of the recruiters.

Make sure you are registered for Engintrak. If you don't know what that is, then go to the ECRC soon and get registered. Submit your resume to the companies of interest ahead of time. Most recruiters at the career fair will tell you to do so anyway. Also, if you visit the company's website, check to see if there is a place to "submit a profile" or "upload your resume" to their database. If there is, take the time to do it ahead of time, it will look that much more impressive when the recruiter asks you about it during the career fair.

Research the companies of interest. This is most people's least favorite task and is often overlooked, but extremely important. I'm not saying you need a rundown of the company history or anything, just go to their website and spend 10 minutes writing down a couple of points of interest. For example, some things that could be helpful: location of their headquarters, the industry (very important), and maybe some new products, mergers, or recent news about the company. With just a few details like this you can make it seem like you know a lot about the company. When talking with the recruiter you can find moments to insert these tid-bits of information: "So I know your headquarters is in _____, but do you have opportunities in any other locations?" or "I recently read that your company is merging with _____, how will this affect the company culture?" You should also want to know *why* you want to work for the company, which is a common question asked by recruiters. Generic answers can be dolled up with a bit of information. For example, if you were talking to Accenture, you could say:

"I want to work for Accenture because your company is great and I think my skills could bring something unique to the table. Your continued accolades from *Fortune* magazine and the recent launch of your, *Go on. Be a tiger* campaign reflect your dynamic organization's critical and successful decisions in the past that have given you an edge in the consulting industry."

That can be tailored to any company just by inserting one line of information about them and their company name and industry. Going to information sessions can be more helpful than you think, especially if the recruiters are there. "Face time" can go a long way. If a recruiter has to decide between two candidates with identical qualifications, and they have had an opportunity to interact with one and not with the other, chances are they will pick the person who has had more "face time." Plus, info sessions are an easy way to take notes on the company for those "tid-bits" of information to insert into conversation (as mentioned in the previous paragraph).

Personalized cover letters are also a good thing. Here's a little trick of mine that can make the process a little easier. Make a generic cover letter about yourself and your qualifications for a specific industry, e.g. consulting. Insert a couple of sentences that mention the company name, e.g. "Bain would be a great place for my skill set, etc. and for each company, just replace the company name, and voila, you have as many cover letters as you need. Handing them out at the actual career fair will make you stand out. Practice makes perfect. Practice talking about yourself. You are going to have to walk through your resume in several minutes at each company booth. Make sure you know exactly what you want to point out about each of your past experiences, and also make note of extra curricular activities to let them know you are a well rounded individual. Make eye contact with the recruiter and try to keep a smile and conversational tone about your voice.

Finally, when finishing off your conversation with the recruiter, be sure to thank them for their time and ask for their business card. Later that day send them a follow up message. Keep it short and sweet and try to maybe add in something you discussed during your conversation...something along the lines of:

"Dear John Doe,

I just wanted to follow up on our discussion at the career fair today. I really enjoyed talking about _____. I am very interested in pursuing a career at _____. I have attached a copy of my resume and cover letter for your reference. Thank you and I look forward to hearing from you in the future.

Well, that about sums up tips for getting the interview. It's up to you to decide whether or not you actually take these tips and apply them instead of sitting there and saying "Oh yea, I know I should do that" or "I already knew that", etc. I had over 20 interviews last semester, so I can vouch for the success of actually following these tips. Once you have your foot in the door, the rest is up to you. Good luck with the job hunt.

Senior Spotlights

By Mingcheng Lim



Kok Keng Goh

Future Plans: I would probably go with consulting (a.k.a. the training grounds for CEOs), since experiences come fast and the work is flexible... probably consulting among some of the best places for professional development, especially in 3 key areas: Knowledge, Skills, People. Can't go wrong with that combination.

Favorite IOE Class: Definitely IOE 461: Six Sigma. It's probably among the most useful classes you'll ever take away from this university, simply because of its applicability in almost all manufacturing/service settings (unless you're working for a financial services firm). Pat Hammett's a great professor, and you just have to love the video recordings of classes! Imagine not having to go for class, and watching it later at the comfort of home... pura vida, as some of my friends say.

Least favorite IOE class: I'm not eligible to say.

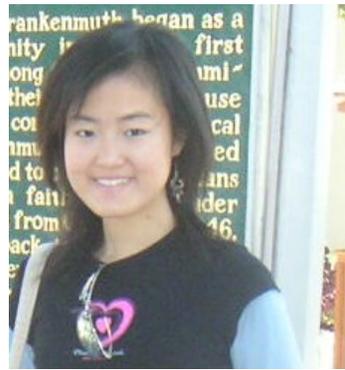
Favorite IOE Professor: I'd have to juggle between Robert E. Anderson (lecturer for IOE 425) and Pat Hammett (IOE 461). Unfortunately I can't state a clear winner.

Favorite IOE GSI: My favorite GSI has to be Damon Williams, undoubtedly the most comedic GSI with a great teaching style, and very deserving of a Best GSI award.

Favorite Spot in Ann Arbor: Got to be the Reflecting Pool outside the IOE and Lurie Buildings on a good Summer/Autumn day.

Favorite Place to study: GGBL 2304 computer lab. It is a lab that probably only Civil Engineers know about, located on the far side of the GG Brown building. It has some of the newest computers, least people, and best ergonomic settings (light, chairs, desks, everything you learned in IOE 333) among all the places in North Campus. You'd have to accept the distance though – not exactly the easiest of places to get to.

Advice for the rest of us: For new international students - Get the best freshman internship you can find, even if you have to work for a pittance! Forget doing spring/summer classes! Nothing is harder to account for than the missing term of experience on your resume, especially with the competition from a ludicrous amount of engineers in U-M. For all IOEs - Get as much exposure to all possible fields of work offered by your degree. Work for a financial company for a summer internship, a manufacturing one in your next. Don't wait till your senior year to decide which company you want to work for - get out there and NETWORK NOW with the ALL the recruiters from companies you like. Be a CONFERENCE COMMANDO. You won't regret the amount of time and effort you put in when you reap the rewards at graduation year.



Meng Joo Teo

Future Plans: I will go back to work in a government agency in Singapore, and later enter the manufacturing or logistics industry as quality engineer or consultant.

Favorite IOE Class: IOE 441 and 461, because they are very useful and applicable in industry. It's also really cool to see how the concepts in class actually help.

Least favorite IOE class: Ergonomics classes. The classes are interesting, but the topic is just not my cup of tea.

Favorite IOE Professor: \Quite many... just to name a few, Dan Reaume, Goker Aydin, Pat Hammett

Favorite IOE GSI: Well, I do not have any favorite GSI.

Favorite Spot in Ann Arbor: My apartment, where I can lazy around and chill and watch TV

Favorite Place to study: Any and every cafe in town.

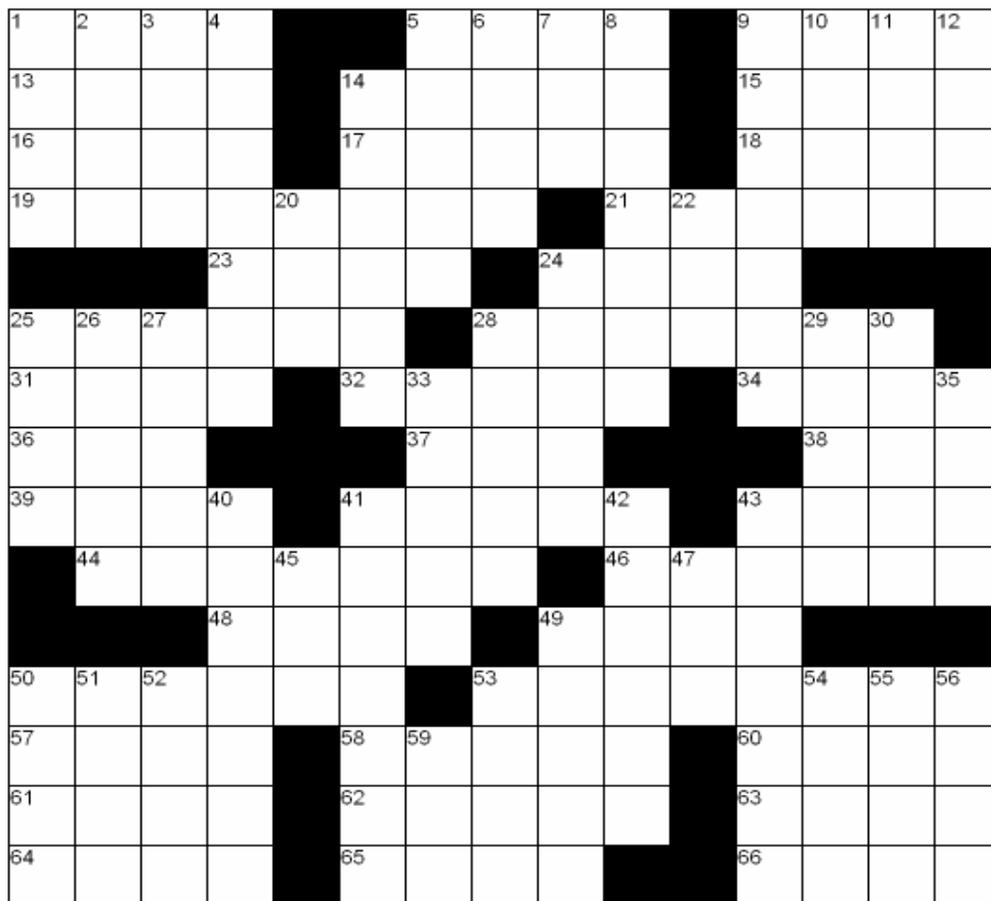
Advice for the rest of us: Work hard and play hard... you're only young once!

You'll be here soon, too!



The Back Page

Now with more Fiber



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| 23. Author | 43. Soon | | |

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Note: The opinions expressed herein do not necessarily reflect those of the Industrial and Operation Engineering Department at the University of Michigan—Ann Arbor. Any questions or comments should be submitted to IOEBlueprintGroup@umich.edu

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