

CE CONNECTION

Your Link to the Department of Civil Engineering

FALL 2021 | ISSUE 36

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SACRAMENTO STATE
Department of Civil Engineering



CHAIR'S MESSAGE



Dear Colleagues, Alumni, and Friends,

I hope this email finds you all doing well and enjoying a good start to the new year. We are well into 2022 and while on one hand we continue to see some of the challenges associated with the pandemic, on the other hand there is hope and good news. For the first time in almost two years, we are truly back on campus, with more than 95% of our classes face-to-face in the Spring 2022 semester.

The past two years were not easy, and everyone has faced numerous challenges and difficulties. Many of us have struggled with hardships and tragedies. However, the Department has continued on its path towards overcoming these challenges in order to support student, faculty, and staff successes. As is evident from the stories featured in this issue of the CE Connection, everyone—students, faculty, staff, alumni, and industry partners—have contributed and played a part in this journey. Faculty have received grants for scholarships, promotions, and recognition for their dedication and hard work; students have received awards and found jobs to serve their communities and fulfill their dreams. Although we have lost a friend with the sad demise of Mr. Arvid “Jim” Peterson, his memory will stay alive through his passion, commitment, and everlasting support of the Department. Staff have persevered through some of the most strenuous times the Department has seen, and our industry partners have been more generous than ever to support us in the past year. I share my sincerest gratitude with all of you for your continued efforts and support.

To further add to the sense of excitement of returning to campus, I would like share that the Civil Engineering Dept. is planning to host our industry community and campus partners in-person for the 13th Annual Ken Kerri Endowment Fund Luncheon, scheduled on April 13th, 2022. The keynote speaker for this year's event is Mr. E. Joaquin Esquivel, Chair of State Water Resources Control Board. To register and for more information, please visit <https://www.csus.edu/college/engineering-computer-science/civil-engineering/ken-kerri-endowment-annual-luncheon.html>.

I hope you enjoy this newsletter, and I share my best wishes with everyone for the remainder of the new year.

Yours sincerely,
Ghazan Khan
Chair, Department of Civil Engineering



SACRAMENTO STATE
Department of Civil Engineering

Support the Department

Looking for a way to support the Civil Engineering Department? We have four different funds that enhance our ability to educate students:



- ▶ **The Ken Kerri Endowment Fund** — Provides support for faculty and student enrichment activities.
- ▶ **The CE Freshman Scholarship Fund** — Scholarships to an outstanding first-year student.
- ▶ **The Graduate Environmental/Water Resources Scholarship Fund** — Scholarships to deserving graduate students in the environmental or water resources engineering areas.
- ▶ **The Department Trust Fund** — These resources support student attendance and participation at conferences and competitions, senior design project team expenses, and equipment for labs when other funds are not available.

To donate to any of these funds, go to <http://bit.ly/ceonlinedonate> and follow the directions for online donations.

- ▶ Or mail a check made out to the appropriate fund to:

Attn: Ashley Mihok
California State University, Sacramento
Department of Civil Engineering
6000 J Street, MS 6029
Sacramento, CA 95819

- ▶ For additional questions on how to give, contact:

Nebrisa Fish
Director of Development
(916) 278-2453
nebrisa.fish@csus.edu

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Upcoming Events

April 13, 2022:

13th Annual Ken Kerri Endowment Fund Luncheon

at the Sacramento State Alumni Center
11:30 am – 1:30 pm

Please consider supporting the Department of Civil Engineering.

As we transition back to our in-person traditional events during the year, and on-campus classes, your dollars will be incredibly important to support the department.

<http://bit.ly/ceonlinedonate>

www.csus.edu/ecs/ce

Like us, and follow us to stay up to date on current CE News and Events!



Event

RECAP



Annual Golf Tournament 2021:

Getting back into the
swing of things.



After a year-long hiatus, the Civil Engineering Department's 9th Annual Golf Tournament was held on Friday, October 15 at the Bartley Cavanaugh Golf Course in Sacramento. More than a dozen students and several professionals from both the private and public sectors were in attendance. The event was a welcome return to traditions that have shaped the Civil Engineering Department into a unique program known for its emphasis on networking students to local industry leaders. Local representatives from firms throughout the Sacramento area were also thrilled at the event's return, and welcomed the opportunity to meet up-and-coming students to advise them on career possibilities and to give insight into life post graduation.



“

...connections like these are why these events are so powerful for students like myself.



Here is what a few of those who were in attendance had to say about their experience of the Golf Tournament:

Mitchell Daniels, Senior, Graduating Spring 2022: "I had a great time at the Sac State CE Dept. Golf Tournament. I was paired with two engineers, Justin and Aaron, from Ghiradelli Associates. They were great to play and interact with and seemed genuinely interested in how school was going thus far and what our plans were after graduation. We were able to exchange contact information and they told me to touch base with them when graduation approached. Making connections like these are why these events are so powerful for students like myself. The industry interaction is invaluable. And you get to play a free round of golf!"

Ali Ahmad, Senior, Graduating Spring 2022: "I really enjoyed the one-on-one conversation with the people who are leaders in their respective fields. For example, both of my golfing partners (from T.Y. Lin Transportation Division) are responsible for hiring new people and bringing projects for their company. I really enjoyed how they welcomed all of our questions no matter how random or similar it was to the field of civil engineering. I also enjoyed how they shared their experiences with us and shared how they reached the level they are at today and what path they took, which was really important to me. I also loved how they advised us on what classes to focus on, what skills to develop while still in school, and what skills to develop while we are working full time. Before that I was confused and had a lot of questions about career paths...but this event helped me get answers to all the questions I had regarding civil engineering and the potential paths I can take."



It's exciting to see the crowds get bigger and hear the stories about how we are all connected in this small community.



Bradley Waldrop, PE, M.ASCE, QSD of Ardurra Group, Inc: "I've been helping organize this event for a few years. It's exciting to see the crowds get bigger and hear the stories about how we are all connected in this small community. It's an amazing opportunity for students to get a feel for what they may do for the rest of their careers. And it's a great way for employers to connect with future talent. I'm hopeful we'll see even bigger crowds in years to come. Best of all, it's a great way to let your hair down and get some fresh air and exercise—we all need it!"



CSUS—Department of Civil Engineering

PRESENTED BY

Rob Aragon

WESTLAND
CAPITAL PARTNERS



PREVIEW OF

An Evening with Industry

The 18th annual Evening with Industry was held virtually via zoom in view of the concerns surrounding the pandemic and to protect the many students, faculty, and industry professionals in attendance. Held over the course of two hours, students had an opportunity to speak to panelists consisting of former Department of Civil Engineering alumni and discussed the many facets and levels of working within the realm of engineering post-education.

This year's keynote speaker, Rob Aragon, who is an alumni and founded his firm Westland Capital Partners in 2009, eagerly discussed his career history with students. He used his own personal story as a tale of encouragement to those in attendance. Aragon also displayed outlines and maps of his current project, which includes redevelopment of the new Folsom Ranch area south of Highway 50 in Folsom.

After the conclusion of his presentation, a panel of professional engineers speakers answered questions from students before breakout rooms enabled attendees to have one-on-one time with representatives from the many different firms present for the event.

Check back with the CE Connection in the Spring of 2022 for our full article.





Remembering *Jim Peterson*

The Civil Engineering Dept learned of the passing of Jim Peterson in early November 2021.

Arvid J. "Jim" Peterson was an alumni of Sac State, graduating with his Master's of Science degree in 1998. He worked with the Air Resources Board for nearly two decades.

Peterson worked with the Civil Engineering Dept to establish, "The Arvid J. Peterson Fund in Environmental Engineering," totaling \$1.3 million to support the environmental engineering program for undergraduates and graduate students. Inspiration for this funding came from Mr. Peterson's recognition that many of the faculty and instructors that had motivated and guided him over the course of his own education were stepping down. He was aware of the value of high quality faculty to students and gap in knowledge that would exist between those retiring and the new students stepping into the world of engineering for the first time. The funds from the endowment will go towards hiring instructors and providing labs and equipment necessary to enhance the environmental engineering curriculum.

Although the department is sad to learn of his passing, Jim Peterson will be remembered as a man who recognized that change begins with the foundation of a strong education and the unending gift of knowledge. We are grateful for his donation and know that his legacy will live on in the spirit of those who will benefit from his endowment fund and change the world around them.

INFRASTRUCTURE RESEARCH LEADS TO AWARD FROM THE DEPT. OF WATER RESOURCES

Award

California is one of the most seismically active regions in the United States, and earthquakes are an integral part of our lives. Californians learn how to prepare for an earthquake and know the drill: drop, cover, and hold on.

Engineers and scientists, supported by policy makers at all levels of government, are continuously encouraged to study ways to enhance the safety and resilience of our infrastructure, and implement changes that will protect one of California's most precious resources: water. It is essential that these structures perform well in an earthquake and protect both the water supply and the people living downstream from those structures. With over 1400 dams, the California aqueduct, and many other water resource infrastructures around the state, what can we do to protect this critical infrastructure from damage in a future major earthquake?

According to Dr. Richard Armstrong, Professor of Civil Engineering, there are plenty of ways to mitigate the effects of an earthquake. Dr. Armstrong is collaborating with the Department of Water Resources (DWR) to evaluate the seismic stability of the state's dams, the California aqueduct, and other water resource infrastructure. Dr. Armstrong will undertake multiple tasks, including developing seismic analysis methods, reviewing seismic instrumentation data, and developing early warning systems and post-earthquake damage prediction. To support this much-needed research, DWR has awarded \$200,000 to Dr. Armstrong.

Written in collaboration with Dr. Richard Armstrong and Dr. Mariappan Jawaharlal



"I am very grateful for the opportunity to support DWR in their efforts of evaluating the seismic stability of their infrastructure,"

says Dr. Armstrong regarding his research. "The work fits well within my technical wheelhouse and I am excited to contribute. I feel this project takes me, 'professional' full circle—my engineering job following my PhD was at DWR, and I really valued the work I did then."

Application of the work completed with DWR could have far-reaching implications outside water resource infrastructure. With the knowledge gained from this research, homes, businesses and critical infrastructure, such as farms, factories and power grids, could be spared from crippling damage or days of setbacks, which often arise in the aftermath of major seismic activity. Many lives could be saved if advanced warning systems can alert the public to take shelter before an actual earthquake strikes. It is with much humility, and with great pride, that Dr. Armstrong accepts this grant to pursue knowledge that will contribute to the safety, health, and well-being of all Californians.

Award

PART-TIME PROFESSOR WINS ESTEEMED ASCE AWARD

Michael Shami, Senior Engineer at California Department of Transportation and Adjunct Faculty Member in the Dept. of Civil Engineering, was the recipient of the Theodore D. Judah Transportation Award. Presented by the American Society of Civil Engineering, the award seeks to recognize "... outstanding engineering achievement specifically related to Transportation Engineering." It is presented to those who have worked in either the public or private sector and who have made a "significant impact" in the field of transportation.

Each year, the Sacramento division of the ASCE asks members who are nominated to fill out a form describing their contributions. A panel then reviews the submissions and from there selects a winner.

Mr. Shami, who has been Adjunct Faculty with the Department since Fall 2016, states that he was "honored" to have been nominated and selected for the award, and is grateful for this valuable achievement. "It made me feel appreciated for the hard work I did towards the transportation engineering practice and teaching."

The Department of Civil Engineering congratulates Mr. Shami on receiving this award and for his excellence in the field of transportation engineering, and thanks him for his dedication to the education of his students and support of curriculum in the Department.

“

It made me feel appreciated for the hard work I did towards the transportation engineering practice and teaching.



RESEARCH AWARD GRANTED FOR EXPLORATIONS INTO CONCRETE SUSTAINABILITY

Award

The Civil Engineering Department is proud to congratulate graduate student Alexis Guerrero and his advisor, Dr. Jose Garcia, for being awarded the 2021/22 College of Engineering and Computer Science Evergreen Research Assistantship Award.

The prize, worth \$3,600 per year, will be awarded directly to Guerrero for his contributions to Dr. Garcia's research.

"Alexis is working on developing and testing a more environmentally friendly concrete mixture that combines portland limestone cement (PLC) and recycled high density polyethylene plastic (HDPP) fine aggregate,"

explained Dr. Garcia. "[We] developed a testing matrix to study the mechanical properties of different concrete mixtures. Alexis is going to cast concrete cylinders and test them in compression to determine the compressive strength of these mixtures."

Guerrero further described the research by stating, "Dr. Garcia and I will be testing concrete mixtures that contain fine plastic aggregate, as well as other replacement constituents that are intended to perform equivalently to typical concrete mixtures while potentially being more sustainable. This involves an understanding of concrete's constituent behavior and cement composition, as well as understanding the codes and standards that regulate

everything related to concrete and cement. Dr. Garcia's Concrete Technology class [CE 196H] more than prepared me for this type of research."

"The biggest obstacle has been the uncertainty of the laboratory access and material procurement due to the pandemic," Dr. Garcia continues, referencing the closure of the campus last year as well as the hold that was placed on the opening of the new Concrete Durability Research Laboratory. "Luckily, we have been able to make it to the lab and start preparing everything. Alexis expects to be very busy next semester but we are very excited about the study. We hope that we can submit an article to a scientific journal to disseminate the results of the project."

Guerrero, who will be graduating in the Spring of 2022, is enthusiastic about what this research could mean for both society as a whole, and the opportunities this allows other graduate and undergraduate students interested in concrete technology. "As a school whose reputation lies in its excellent hands-on approach and practicality of theory and design, I am excited to see what else Sac State will bring to the table to continue that reputation, and how they will ensure students will be further prepared for the challenges we will face as far as structure resiliency, durability, and sustainability goes."



THE 13TH ANNUAL
KEN KERRI
Endowment Fund

LUNCHEON

Save the Date!



The 13th Annual Ken Kerri Endowment Fund Luncheon will be held on Wednesday, April 13th, from 11:30am to 1:30pm in the Sacramento State Alumni Center. Lunch will be provided.

The Keynote speaker for the event is Mr. E. Joaquin Esquivel, Chair of the State Water Resources Control Board.

If you would like to attend this year's event, or if your organization would like to become a sponsor of the Ken Kerri Endowment Fund,

please reach out to Ashley Mihok:
ashley.mihok@csus.edu.

Please be aware that the Civil Engineering Dept is continuing to monitor the ongoing situation with Covid-19. Should the situation change, we will notify attendees of the switch from an in-person event to one that will be held online.

We thank everyone for their patience and understanding, and hope to see you all on-campus for our event in April 2022.

Tenure Celebration

The Department of Civil Engineering is proud to announce the promotion of Dr. Cristina Poindexter from Assistant Professor to Associate Professor, and would like to congratulate her on achieving tenure with the University.

Dr. Poindexter joined the faculty as an Assistant Professor in the fall of 2015, after completing her graduate studies at UC Berkeley. Previously, she worked at the Office of Water Programs on dam inundation mapping, sizing a woodland buffer for wave attenuation, and studied climate change impacts on runoff.



"I love sharing my enthusiasm for water resources engineering with students, both in the classes I teach and when working with students on applied research,"

says Dr. Poindexter. "I'm very happy to be able to continue working at Sac State and very thankful for the support and guidance from the department over the last six years."

Most recently, Dr. Poindexter was elected to serve as Graduate Coordinator responsible for the overall management of the Graduate Program in the Civil Engineering Department. Congratulations to Dr. Poindexter on her success and on all of her future endeavors here at Sac State!

Returning to Campus:

THROUGH THE EYES OF A STUDENT



Bryce Duncan is a full-time transfer student that began taking classes at Sac State in the Fall of 2020, after on-campus learning had been suspended. He continually strives to excel, taking 16 units this past semester, and intends to graduate in May 2022. His experience offers a glimpse into just how important and valuable interconnectedness at the University is for all students, and what “campus life” means to someone whose first steps as an undergraduate on the grounds was well into his third semester.

1

Tell me about some of the challenges returning to campus this past semester. What were some of the challenges you faced?

One challenge I faced was moving to the Bay Area for a job opportunity halfway into the semester. I know this is going to impact my upcoming semester because my classes are now all in person. I will be commuting 3 days a week to class, and my commute will be about 2 hrs each way. For the few classes I had in person this past semester, one big challenge was dealing with social distancing and masking requirements. Not all students like to adhere to these guidelines, and it was difficult remaining 6 ft away when they did not respect these boundaries at times. The Professors were good at making sure students were following these rules when they were around.

2

What were some of the things you discovered, or rediscovered, about the campus that you'd missed? What were some positives about being back in person?

I actually haven't had a semester in-person yet because I was a transfer student, and I transferred the semester after Covid first started [after campus was shut down]. I have really missed interacting with students and teachers in person. Zoom courses make it very difficult to have meaningful interactions with fellow students and work with them in classes and on projects.

The few times I have been on campus I have been able to explore a bit and found some great study areas. My favorite area I found has been the AIRC building. It isn't too crowded, so I feel safe studying there, even with Covid still being a daily struggle. It had also been very nice getting to interact with students in person. I truly missed social interaction and have not been able to get much due to people trying to prevent themselves and others from getting Covid.

3

Tell me about some of the ways in which the university has helped you feel safe about returning to in-person lectures.

The few times I was on campus everyone was masked up unless they were outside and completely secluded from others. Professors made sure students were abiding by Social Distancing rules and wearing masks when required or [when doing so was] safest.

4

What are some of the things you are hopeful for with campus continuing to reopen its doors to students in the Spring?

I am looking forward to being able to interact with students more. I am also looking forward to finally being able to sit in a classroom again. I have struggled so hard to focus on my own with my classes through Zoom.

5

How have faculty and staff helped you to feel welcomed back onto campus?

One professor said he is excited to meet us all on campus next semester. He showed a lot of care and empathy for his students the whole semester while still on Zoom, which showed he was very genuine about his desire to meet all of his students in person. I am looking forward to one day meeting him as well.





Graduate Spotlight: An Interview with

Jenna Yang

Jenna Yang, who is a recent graduate of the Civil Engineering Master's Program, was already in her chosen field of work when she decided to return to school. Though the transition between working professional and returning student was difficult, she had family, friends, and the supportive engineering community at Sac State to encourage her on her journey. Below, Yang discusses her motivation to return to school, her experience as a student, and what makes her excited about her chosen field of interest.

What is your educational background?

I completed my undergraduate (BS) degree in Hydrology, from UC Davis. The hydrology program required some of the same prerequisite and foundational classes as most of the Civil Engineering programs.

When did you begin your studies at Sac State, and when did you graduate?

I graduated with my bachelors from UC Davis in 2012 and immediately went into the workforce, so I was pretty nervous about going back to school. I began taking one course [at a time] at Sac State in Fall 2017 and Spring 2018 through the Open University program to, "test the waters" and see if I could be successful in returning to school. Additionally, I needed to boost my GPA before I applied to the graduate program. I was admitted into the Civil Engineering graduate program in Fall 2018, and completed my program this last Spring 2021.

Tell me a bit more about obtaining your Master's Degree.

I completed the Civil Engineering graduate program with a focus on Environmental/Water Quality Engineering. I want to be able to apply what I learn from this program to my current job. I am currently working as an Environmental Scientist for the State of California Regional Water Quality and Control Board. We regulate stormwater discharges from construction and industrial sites to prevent or reduce pollutants from discharging into our storm drains or waterways.

My studies in Hydrology and work as an Environmental Scientist has really given me great awareness about water issues in California. In general, I want to be able to say, when I'm older, that I helped preserve our clean water and environment for future generations.

At work, I read a lot of reports and technical documents created and signed by professional engineers that are intended to help protect water quality. As part of my own desire to continue to develop and obtain knowledge, and grow professionally, I pursued the engineering program to become more technically competent and gain a better understanding of the logic behind engineering methodology and calculations.

Why did you decide to attend Sac State?

CSUS was the obvious choice because I currently reside in Sacramento and wanted to pursue an in-class graduate program. I heard great things about CSUS and their graduate programs from friends and family, including how the classes were small and the professors were supportive and were working professionals in their fields.

Are there any professors or faculty, or specific classes, that helped influence your career path?

Prior to being admitted to CSUS, I did not know any professors or faculty. Dr. John Johnston from the Civil Engineering Department was my advisor through the program and my greatest influence. I am grateful for his advice and guidance. He was also the one who recommended I pursue a fellowship with the Office of Water Programs (OWP) to complete my graduate project.

Each of the classes in this program have provided invaluable knowledge that I find myself using in my normal job. I no longer look at graphs the same after taking Engineering Statistics with Dr. Abadi. Through the Water Resources Planning course, I developed a love/hate relationship with computer modeling software tools. In hindsight, that class provided me with good troubleshooting skills because I actually ended up using a modeling software to complete my graduate project.

Tell me about your experience with the Office of Water Programs.

I was able to complete my graduate project through an OWP fellowship. There were many interesting research topics available in this fellowship with expertise and support from various staff. I chose a research topic related to stormwater, which is an area I'm more familiar with through my job. Under the guidance of Dr. John Johnston and John Heltzel from OWP, I used a modeling software (SWMM) to quantify the benefits of simple rain garden installations used to capture and infiltrate stormwater. I learned a lot during this project, including how to use the software and how rain gardens can have a big impact on stormwater infiltration and treatment. Although we were only able to communicate through Zoom meetings and email due to the pandemic, their advice was always available and helpful. Overall, I had a positive experience with OWP and would recommend it to future graduate students who are interested in a research project for their Culminating Experience requirement.

How did family and friends support you on your educational journey?

Besides professional development, my other reason for pursuing a postgraduate education is my parents. My parents are refugees from the Vietnam War and have always conveyed to me the importance of getting an education because they never had that opportunity. I did this program for them and thank them for teaching me how to be resilient, resourceful, and confident.

Throughout this program, I had a wonderful support system consisting of friends, family, and co-workers who encouraged me to keep going when I thought I was in over my head. I cannot express how grateful I am for having a strong and supportive team behind me.



Survival of the Dedicated: Talking Success with

Alexis Guerrero



Alexis Mejia Guerrero graduated with his bachelor's degree in the Spring of 2020 and was ready to enroll in a master's program that fall. He will be finishing his Civil Engineering degree in the Spring of 2022, with an emphasis on structural engineering. Guerrero chose to attend Sac State in part because he is a local to the Sacramento area, but also because his older brother completed the same program ten years prior to his attendance. Below, Guerrero lists five things he credits with helping him return to school and succeed in the engineering program at Sac State:

Find something that piques your interest.

Originally, I wanted to focus on developing an academic background in geotechnical engineering, as I had been exposed early on to that discipline through ASCE's Geowall club, and I really enjoyed it. However, the more I took structural engineering courses, the more I started to feel connected with that subject. This is evident in the degree to which structural engineers hold public safety paramount; every decision of the structural engineer must always

have the consideration of the public first. Structural engineering is the topic that I was most fascinated by and motivated to pursue, as I see that it directly impacts people's lives and the responsibility of creating these structures is immense, but which I know that I can bear.

Also, explore each sub-discipline in Civil Engineering early. There are a lot of possibilities, and many students think they must wait until they take upper-level core classes to investigate them in depth, but that is not the case. You can explore sub-discipline as soon as Day 1, through all the civil engineering clubs, such as ASCE, Geowall, Concrete Canoe, ACI, EERI, and many others that directly expose you to their respective discipline of focus. Get internships early through Sac State's career fair, where contractors and engineering firms are always looking for students eager to learn more and contribute. You can also explore it further by being part of any graduate research opportunities that become available.

Feel free to refer back to the basics.

Dr. Monzon's Mechanics of Materials class was both my first exposure to structural engineering theories, as well as the class that made me interested in structural engineering. I found myself enjoying every single lecture and eager to learn more. More importantly, now as a practicing structural design engineer, I see that Mechanics of Materials is absolutely the cornerstone of all structural design. There are times in structural design where you must go back to basic statics and mechanics of materials, and I'm thankful to have learned such important theories from Dr. Monzon. Moreover, Dr. Garcia's Concrete Technology class served to further develop my understanding of concrete and its constituents, which helped fill in the gaps of some lingering questions I had in Reinforced Concrete, but also is directly helping me now in my master's thesis. Every graduate class I have taken has aided me in understanding the concepts and design procedures I utilize in the professional environment. It's very satisfying to see how seamlessly what I am learning in the graduate program is transferring to the working environment.

Have an idea of what you'd like to do once school is finished.

Post-graduation I intend to work for a structural engineering firm whose core values and design outcome will be for the betterment of the future by holding public safety paramount. I am also currently involved with humanitarian efforts such as Habitat for Humanity and Engineers Without Borders and intend to invest more time with them.

Have a support network.

My parents, Yolanda and Jose Guerrero, sacrificed a lot coming to the United States as Mexican immigrants so that their children would have a better future. Being a first generation American, I will never forget that. I'm always thankful for their choices and their unwavering support, which has led me to where I am today. My sister, Veronica...showed me the value of never settling. My brother, Oscar, who became a water resources engineer for the State Water Resource Control Board, was my role model. I have made many friends who supported me and made my college experience especially memorable. Even now in the graduate program, old friends and new ones are continuing to support me and make this worthwhile.

Understand the ethics behind the profession.

As a civil engineer, you are one of the primary holders of public safety. You are in charge of designing the systems that get water distributed to people in need, that let drivers get to their destinations safely, that won't let incredibly large buildings settle and collapse, and that detect harmful chemicals in the environment. Civil engineering is a career where, if performed incorrectly, collapses infrastructure figuratively and literally. People can die if you make the wrong choices. You must ask yourself now if you are willing to take on this massive responsibility and sacrifice, and aim to do so in the right and ethical way. Sac State has everything you need to succeed in this field, you can go very far with what Sac State has to offer, but it's up to you to decide to get there the right way, for the betterment of the future, and the safety of the public.

Make sure you have fun!

Strive to balance college with your social life. You'll make many great friends and memories at Sac State, you'll learn a lot from great professors, and you don't want to miss out on any of it by focusing more on one over the other. Make your time worthwhile by paying attention to everything school has to offer.





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