

# MESA Milestones

Featuring momentous affairs of the MESA program at Allan Hancock College

Fall 2019

## UCSB STEM Student Welcome

by Angelica Eulloqui, MESA/STEM Counselor

MESA/STEM students and ENGAGE scholars visited UCSB's annual STEM Student Welcome Event on Friday, September 27, 2019.

Students learned about UCSB's admissions requirements, internship opportunities and resources available and heard from transfer and graduate



students. Students gained knowledge about the important things they should be doing to gain the most out of their time at community college and make themselves competitive applicants in STEM majors to UCSB. Faculty and students discussed the value of engaging in internship experiences prior to transfer. UCSB offers various internship opportunities, many of which are open to California Community College Students. For students that are interested in applying to a summer internship please check out the following link <https://csep.cnsi.ucsb.edu/programs/cc>. Additionally, students were invited to tour various STEM labs and had the opportunity to meet current graduate students and STEM faculty that occupy the labs. Lastly, students visited a resource fair to learn more about programs, resources and student organization available to facilitate student success at the university. The visit provided potential UCSB transfer students with the opportunity to make connections prior to transferring and it allowed students to gain valuable knowledge, and learn about various resources available.



## Don't delay!

Now is the time to invest your time and energy into securing 2020/2021 scholarships and summer 2020 Internships! See the links below and learn about securing scholarships and internships – two invaluable components of a STEM education.

<http://www.hancockcollege.edu/stem/scholarships.php>

<http://www.hancockcollege.edu/mesa/MESAinters.php>

The only thing standing between you and scholarships/internships is your effort to make it happen.

If you need help, see your MESA/STEM Centers for assistance. Make it happen for yourself. You will never regret it!

# Switching Lanes

by Allan Chavez, MESA Student, Mechanical Engineering



I began at Allan Hancock College after working for about three years after high school. High school was not a great experience for me because I was not performing well academically. I did not have the guidance I needed to get me on track to go to a university. I graduated by a slight difference of three points, which were not earned but given by my instructor when I was home-schooled. I soon realized once being in the workforce that life isn't as easy and structured as the grade schools made it seem. I struggled to get back into rhythm and was getting terrible grades once back at Allan Hancock. The critical-thinking classes like chemistry, math and physics were huge walls for me that I couldn't climb over. Plus, I wasn't convinced what career was the best fit for me and couldn't find the right direction.

One day my cousin asked me to meet with him at the MESA center to study and hang out, since we were both going to be at the Santa Maria campus all day. I was able to meet several of last year's transfer students, and after several conversations, I realized they were on careers that revolved around them fixing problems they wanted to see change or improve. I dug deep down in my own beliefs and realized I wanted to change my environment and provide a quality service for others. I grew up in Mexico in a small village of about forty homes and we never had any of the commodities that make home feel more like home such as air conditioning or warm water to shower - the smaller things that one takes for granted until they aren't available for us. My dad has an automotive shop and I work for him on the weekends. Working alongside my dad has helped me gain experience with running a business and working hard to make sure things stay in order. At the same time, I am gaining the technical, hands-on experience of working with tools and understanding moving components. Exposure to all these things lead me into discovering a major that suits me, which is mechanical engineering. My goal is to major in mechanical engineering and discipline in HVAC. To open my own HVAC company in the future and to provide jobs for my own friends and family is a goal of mine.

At MESA, I was able to find the comfort and the atmosphere needed to improve as a person and as a student. When the afternoon hits, and everyone is out of their lectures, the center is full of hard-working students solving problems alone and in teams. This is really motivating and makes me want to work even harder on my own tasks when I look around. In addition, whenever I would have a difficult time on my work, I know I can always count on the amazing tutors that take the time out of their days to help. I have matured as a person and as a student much more than I ever thought I would. I now truly understand the meaning of sacrifice and hard work. I used to be the person that avoided hard obstacles by any means, but I now enjoy the struggles of taking difficult classes. The tough moments are the ones that have exposed more of my grit and fortitude to see goals being accomplished. I'm thankful for the professors at Allan Hancock College, the counselors that have provided me with quality advice and help, and everyone at MESA that help students like myself to change the course of their lives and help them achieve their goals.

## Enroll! STEM Students

### STEM 100 – Success Strategies in STEM

- Learn about career options in STEM
- Develop effective learning strategies in STEM
- Plan academically using college resources
- Network within the STEM discipline

## STEM Academic Strategies: Setting Yourself up for Success

It is no secret that STEM students are required to follow a rigorous academic curriculum in order to transfer to a four-year university and earn a bachelor's degree in a STEM field. It is imperative that STEM students develop strong academic strategies in and out of the classroom in order to achieve their academic goals. MESA offers workshops designed to educate students about strategies and techniques they can use to facilitate their success in their STEM courses.

### IN CLASS TECHNIQUES

- **Be alert and involved**
  - Participate in class discussions
- **Be content ready**
  - Use the syllabus to be aware of content that is coming up
  - Do the assigned readings
  - Complete practice problems
- **Be prepared**
  - Stay organized for your readings: know what the reading assignments are and stay on top of them
  - Bring any needed supplies with you - this does not just mean a pen/pencil and paper, but anything that would be helpful for class
- **Take effective notes**
  - Write in your own words
  - Do not sacrifice listening for writing
  - Indicate important topics/terms
  - Include drawings and annotate

### Self-Care and Stress Management

- You have peak stress times and low stress times – recognize, acknowledge, and plan
- Make sure each day allows you a chance to unwind/manage stress – maintenance is the key

### Time Management Strategies

- **Daily to-do List** – plan out things that need to get done, complete top priority items first
- **Weekly Schedule** - plan in class time, study time, work time and other commitments - account for each hour of the day
- **Monthly Calendar** – plan important deadlines, appointments, timelines, long range plans, social events, academic milestones/assignments steps

### OUTSIDE OF CLASS TECHNIQUES

- Build in study time into your schedule & study regularly
- Take notes while studying
- Study with peers (study groups)
- Study in an appropriate environment
- Review notes regularly
- Complete the homework and readings
- Use supplemental materials
- Use tutoring
- Use office hours
- Develop your own review sheets for exams
- Surround yourself with other students who are dedicated and working hard

# MESA and My Personal Journey

by Crae Hillier, MESA Student, Statistics

I'm a first-generation college student who found schooling tough throughout my life; not because of the specific material or subject matter, but because rarely would anyone answer "why." Why we had to do this specific thing, why did they name the land that, why isn't there no one named Sandwich now? Most commonly these questions would be answered with a clipped response or I'd politely be told to not interrupt class. Eventually I just assumed you weren't supposed to ask questions and somehow just *know* the information. As my schooling progressed, I would begin to flounder and, rather than getting help, I would disrupt the class, either through jokes or by just acting out. This came to a head in my 9<sup>th</sup> grade year when I was expelled from my local high school and attended a string of continuation schools to get a diploma instead of a G.E.D. I fully believed I had no options after high school, so I just wasted my time until I was 25. I realized that I had no options and working for a company that wouldn't allow me change shifts, since I was the only graveyard employee.



I spent many nights trying to figure out what appealed to me, and, after a year and half of searching, I found something that piqued my interest, becoming an Application Developer. I enrolled into Allan Hancock College the next available semester: Summer of 2017, under the Computer Science major. Shortly after enrolling, I applied and joined a string of support programs available to students, one of them being MESA. As summer turned to fall, and fall into spring, I found myself only using MESA consistently. I had access to a counselor I could talk to, who actually tried to understand me and my reasons, a space to come in and do my work (with a drink on the table!), and an open and welcoming community. What truly enamored me with MESA was that I was given space; the space to think, to do my work, or to come and relax in between classes.

## CHECK THIS OUT Allan Hancock College Science & Engineering Club

The club's primary purpose is to connect with industry professionals and expand students' education. As club members, students promote camaraderie and communication within the science and engineering departments by organizing lectures, peer advising, fundraisers, ASBG participation and field trips. Visit the STEM or MESA Center for more information.

I felt constrained by many of the programs I was enrolled in, especially when thinking of the freedom I had in MESA. After talking to students, teachers, and some of the program directors, I found out that MESA had made many of the same services provided by other programs, freeing up more time for me to focus on challenging myself to improve, to test everything about myself, especially where I'm lacking. It has also given me the freedom to explore other avenues of knowledge and encouraged to seek out the advice of others. All of this has culminated in finally finding what I'm passionate about, data. Thanks to the freedom and amazing conversations of the small W-21 room, I was able to find out Data Science and began orientating my academic career to be closer situated to being part of a data analytics team. Currently,

I'm seeking a Bachelors in Statistics and with plans on continuing my education to earn a Master's in Data Science, with a heavy focus on data analytics. I haven't chosen a university yet, as I'm exploring the possibility of attending a private institution, since I'm looking to get as much hands-on experience of being a part of a professional team. Fortunately, Data Science is becoming a very in-demand skillset, so I'm very excited to see how far I can do go and where the data can take me.

# Pushing My Limits

by Erik Buenrostro, MESA Student, Mechanical Engineering

If I could go back in time and tell my younger self what I would be studying in college, I would not have believed it. Growing up, school had always been a challenge for me, especially when it came to math. Coming from a Mexican household, Spanish is the first language I learned, therefore making it a bit difficult to learn the English language while continuously learning my native tongue.

Growing up in Lompoc allowed me to experience something that not very many across the world get to experience; rocket launches. Seeing rockets get launched was always interesting to me to the point where I gained a sense of what I wanted to do when I grow up. Elon Musk, CEO of SpaceX and Tesla, is one of many people who have influenced my interest in technology and aerospace. It was not until sophomore year of high school when I decided I wanted to be an engineer, even though I had no idea about the rigorous courses that one has to complete. When people would ask what my plan was after high school I would say engineering, and many would wish me luck. That always freaked me out because I was not the best at math growing up so it would make my confidence levels go down.

Fast forwarding to my first year in college, I was one of those people who wanted to get through without any guidance from counselors. I was always under the impression that community colleges were meant for students to take two years of general education courses and then transfer to a university, but that was not completely true. That resulted in me taking classes that were not necessary, setting me back a year. That is when I began to feel the pressure and decided to seek for help. I heard about the STEM and MESA program through a friend and took interest very heavily. I finally had my Student Education Plan and felt like I was on the right path in my major. At the time, I was a computer engineering major, but quickly realized it was not for me.

That is when I then changed my major to mechanical engineering. Starting my major classes with physics and calculus was a wake-up call that I was going to have to change my methods of studying because it was not like any other classes I had taken before.

Recently, I was selected to experience a week at NASA in Huntsville, Alabama. This experience allowed me to see first-hand what it is like to work as an engineer which simply just further inspired me to continue pursuing engineering. It also allowed me to add experience to my resume since I got to work in a team dynamic.

My goal is to transfer to a university to receive my Bachelor's Degree in Mechanical Engineering. Helping the world and making a positive impact on people's lives has always been important to me, which is why engineering is so great. I have faced many challenges throughout my education, and I am sure I will continue to come across more, but I will not let them stop me from finishing what I have started. Although it is very difficult, I love what I am studying and am excited to keep learning. In the words of Elon Musk, "When something is important enough, you do it even if the odds are not in your favor."



The **Mathematics, Engineering, Science Achievement (MESA) Program** is an academic program that provides a wide range of support services and activities aimed at fostering student achievement and increasing the success and participation they experience while pursuing a degree in mathematics, engineering, computer science, biology, architecture, kinesiology, or other science-based programs. MESA enables students to prepare for and graduate from a four-year university with a math-based degree. It also seeks to increase the diverse pool of transfer-ready community college students who are prepared to excel as math, engineering and science majors. Through the program, students develop academic and leadership skills, increase educational performance, and gain confidence in their abilities to compete academically and professionally.



Visit our website at [www.hancockcollege.edu](http://www.hancockcollege.edu); click on MESA under Quick Links

## Fall 2019 MESA/STEM Activities

- Sept. 13**— MESA/STEM Student Success “Start Here!” (1:00pm-3:00pm; G-106) Mandatory for MESA students
- Sept. 20**— STEM Academic Strategies: Setting yourself up for success (1:00pm-2:30pm; W-23)
- Sept. 27**— UCSB STEM Student Welcome Field Trip, For more information contact the MESA Center at ext. 3446 (8:00am-5:00pm)
- Oct. 18**— Scholarship Strategies for STEM Students (1:00pm-2:00pm; W-23)
- Nov. 8**— UC Admission Application Personal Insight Question Workshop (1:30pm-2:30pm; W-23)
- Nov. 22**— STEM Summer Internship Strategies (1:00pm-2:00pm; W-23)
- Nov. 22**— Scholarship Foundation of Santa Barbara Workshop (2:30pm-3:30pm; W-23)
- Dec. 6**— CPSLO Campus Tour

### UC/CSU Application Workshops

- Oct. 4**— UC/CSU Application Workshop (1:00pm-3:00pm; W-23)
- Oct. 9**— UC/CSU Application Workshop (5:00pm-7:00pm; W-18)
- Oct. 24**— UC/CSU Application Workshop (11:00am-1:00pm; G106B)
- Nov. 1**— UC/CSU Application Workshop (1:00pm-3:00pm; W-23)
- Nov. 12**— UC/CSU Application Workshop (10:00am-12:00pm; G-106B)
- Nov. 15**— UC/CSU Application Workshop (1:00pm-3:00pm; W-23)

**UC/CSU applications due November 30, 2019**

