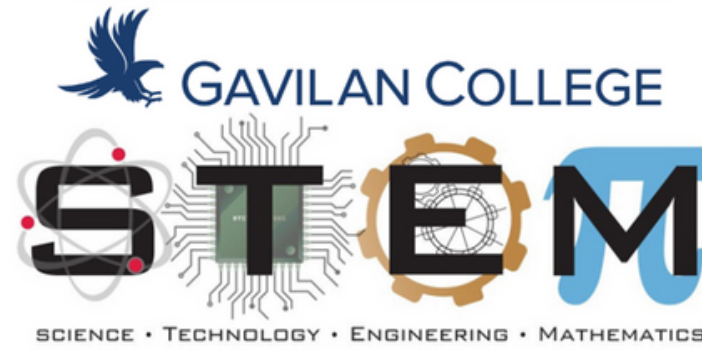


The STEM Academy



What are the benefits of Academy membership?

- Guidance in your academic pursuits from the start of the program until you transfer to a four-year university
- Wraparound support from a team of specialized STEM counselors, faculty mentors, and peers
- Access to the STEM lending library for academic supplies such as books, calculators, laptops, WIFI hotspots, and iPads to offset the cost of college
- Paid internship opportunities
- Stipend (\$) for attending pre-semester math bootcamps

What are membership requirements?

- Successfully complete the preparation course(s) offered before the semester and enroll in the required courses in the Fall or Spring
- Be enrolled in 10+ units a semester
- Be majoring in a STEM field
- Meet with a STEM counselor and/or designated faculty mentor as scheduled throughout the semester
- Devote a minimum of 3 hours/week studying in the STEM Center, and/or other STEM tutorial workshops

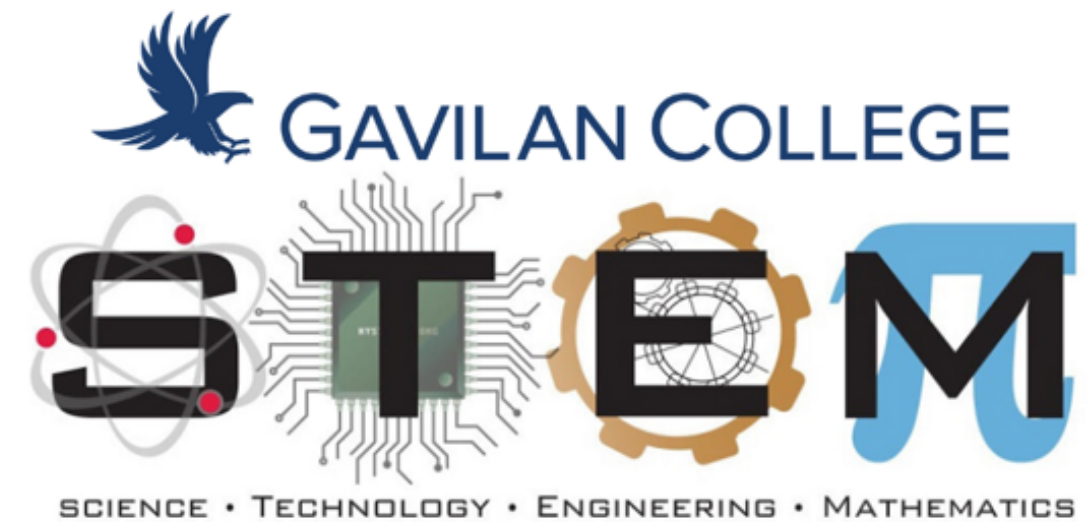
Who is eligible?

Declared STEM majors who are full-time students (or enrolled in 10+ units) at Gavilan in the Fall, and enrolled in the required classes.

How do I join?

The link to the STEM Academy online application can be found by visiting www.gavilan.edu/stem and clicking the STEM Academy tab on the main page. **Questions?** Email STEM Academy Coordinator Marla Dresch at mdresch@gavilan.edu or STEM Counselors Vania Parakati at vparakati@gavilan.edu, or Elizabeth Flores (bilingual) at eflores@gavilan.edu.

www.gavilan.edu/stem
www.gavilan.edu/mesa



Alumni Testimonial Magazine



Vincent Alfonseca

Transferred from Gavilan
Spring 2015

- BS in Mechanical Engineering from SJSU, 2018
- Works at Lin Engineering as Mechanical Design Engineer

Experience in Gavilan College STEM

The best thing about Gavilan College is the passion of the instructors. My experience at Gavilan College was long but rewarding. My favorite STEM moment from Gavilan is attending SACNAS conferences.

What do you like about working in STEM?

What I love about working in a STEM related job is the ability to design and create something that can be used for practical purposes.

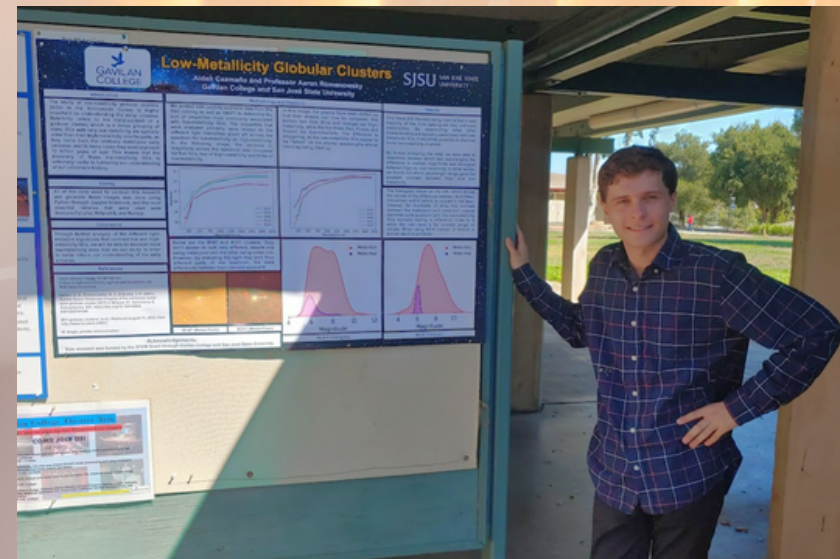
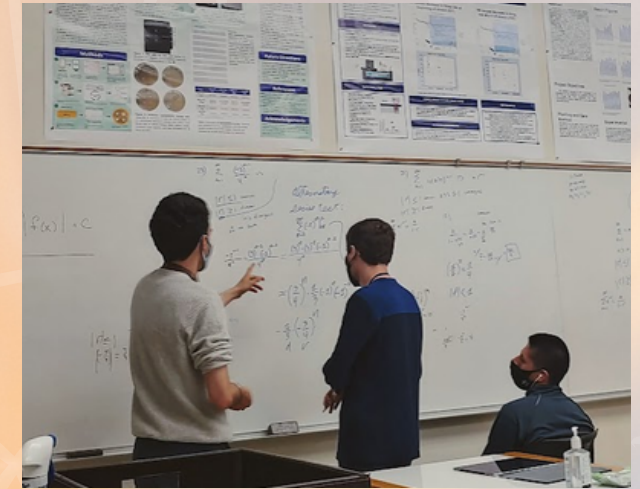
How has your degree helped you?

My degree in mechanical engineering has allowed me to find a career in mechatronics.

Advice for the future STEM Students?

My advice to a student interested in a STEM field is that if you are not tired, you are doing it wrong.

A community of student support and success!



- **B.S. Electrical Engineering, San Jose State University, Graduated May 2021, Application Engineer**

"My degree in Electrical Engineering has allowed me to explore different areas in industry and be a part of creating world-changing technology."

Life Before Gavilan College MESA:

Before MESA, I wasn't using any of the resources being offered at school and I would just attend my classes and go home. I didn't know how to network and I didn't know about any volunteer opportunities.

What does MESA mean to you?

MESA means a chance to receive support to get to a four-year college and being able to reach your goals. They have been a big help to me during my time at Gavilan College especially the counselor Diana Gonzalez. She has guided me in my classes, informed me about opportunities and was there whenever I needed someone to talk to when things got stressful.

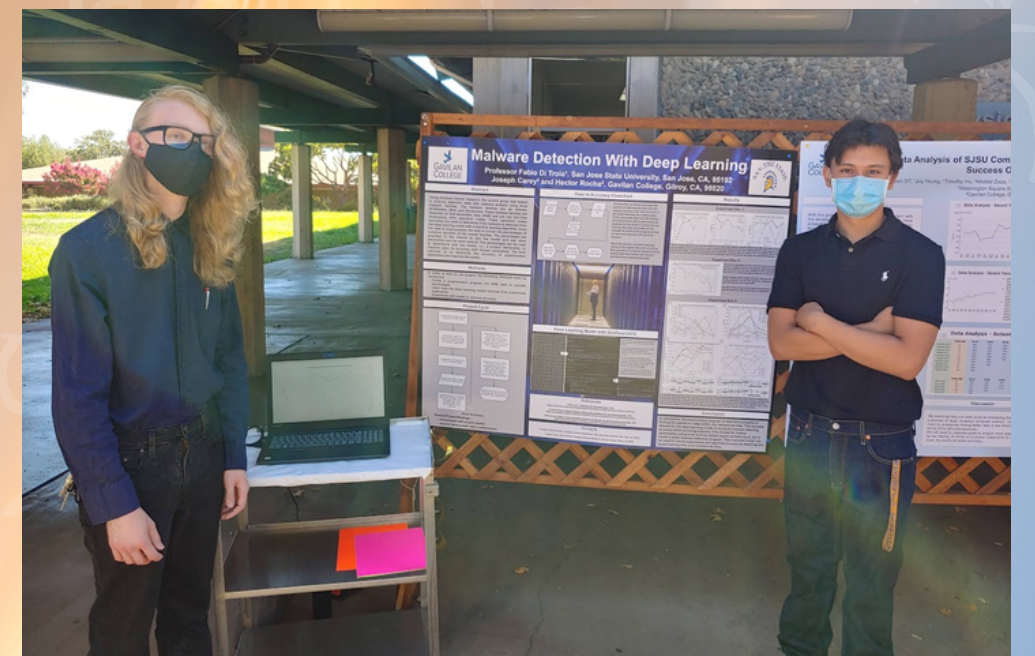
Advice for the future MESA/STEM Students?

Use all the resources the school offers. Join a club and make friends in your class because they are in the same boat as you. Don't be afraid to explore and try something new. It's ok if you don't know, just ask questions.



Laura Leon

Graduated Gavilan: May 2018,
A.S. Degree in Mathematics



My experience at Gavilan was... the most memorable form of education I have ever received. I came to Gavilan after having failed out of a private college. In the beginning I almost failed out of Gavilan too. I took an algebra 2 class with Marla and a Japanese class with Fujita Sensei as my last ditch effort to remain enrolled and those two classes, changed my life forever. The quality of instruction at Gavilan is unmatched. It is a smaller school but this allows for the instructors to properly teach the students, motivate them, and provide them with all sorts of opportunities within the school. I quickly developed a passion for math which led me, in the end of my time at Gavilan, to become a tutor in the Math Lab and complete calculus 2 with a very high grade. I made

My Favorite STEM moment:

In the summer of possibly 2018 I was participating in a summer program called "STEM academy". The students admitted earned a considerable sum of money for agreeing to doing a math bootcamp over the summer and clocking in a certain amount of hours in the STEM center every week. During the boot camp we had a fun little project where each team had to make a paper airplane out of straws, paper, tape etc. We had a big competition outside and it was tons of fun. I also love to remember the days during the school year where my fellow STEM academy friends would meet in the STEM center after class in the afternoon. We would share snacks and start the homework together, often arguing what the right answer was to all sorts of questions which would lead us to making giant equations on the chalkboards to compare everyone's answers close up.

My Advice to a Student Interested in STEM:

My advice would be to not think of having a STEM degree as an insurmountable task that requires an almost impossible amount of work in addition to lots of suffering. In the beginning of calculus, Marla gave us a sheet of paper defining the idea of "grit". Grit was not about grinding through work tirelessly or staying up all night cramming for a test. Grit in STEM is about consistency. You must have the ability to take one topic at a time, small bites one could call it. To be successful in STEM you must not allow yourself to be overwhelmed, you have to schedule time during the day to master each topic and soon enough when the test comes around, you are prepared because you have practiced all the concepts over a long period of time. All in all, I would advise a potential STEM student to stay organized, stay consistent, do not be too hard on yourself, have grit, and take one day at a time.



Elliott Picone

Graduated Gavilan College
2020 with an A.S. in Biology



Aidan Caamaño

Transfer year, degree awarded: 2022, A.S.T. in Physics
Summer Internship Project:
Summer Internship 2022, Low Metallicity Globular
Clusters with Prof. Aaron Romanowsky of SJSU
Planned Summer 2023 condensed matter internship
with Prof. Ehsan Khatami

The best thing about Gavilan College is the real sense of community you find there; small enough to feel quite familial in a certain sense. Due to the fact that it's a small local college, it's not too difficult to feel like you know practically everyone, at least within your department! Larger institutions can sometimes have a colder, more artificial feel to them.

My experience at Gavilan College wasn't terribly eventful for the first few years, where I simply went to class every day and then went home. Then Covid struck, and I spent two years taking classes exclusively over Zoom. In the middle of this period, I decided to put myself out into the world more and better myself by doing something I always felt I might enjoy: tutoring. I applied for the job in the Summer of 2021, and by that Fall I was working, albeit over Zoom. **I enjoyed it greatly**, as I got paid to help people solve math and physics problems; a very gratifying experience. I enjoyed it far greater once in-person classes and tutoring resumed in Spring 2022. During that final semester of mine I shared many good moments and made several good friends as well, **especially with my coworkers in the STEM Center!**

My advice to a student interested in a STEM field: don't be afraid to reach out to help from tutoring resources such as the **STEM Center** or even classmates, and if you haven't any clear idea of what you want to do, but you know you want to do something STEM-related, **consider physics!** It may seem intimidating (though honestly, I think law school and medical school sound far more difficult!), but if you're good at math and problem-solving, it can be a wonderful and versatile degree that'll open up a great deal of opportunities in engineering, computer science, and other technical fields once you graduate. Don't worry about pursuing a PhD unless you love physics so much you'd be willing to sacrifice making more money! Just a Bachelor's will be an excellent degree for finding a high-paying job.



Transferred to University of California Davis, Animal Science, Expected Graduation Spring 2023

My favorite thing about Gavilan College is how easy it is to get support when you need it. It feels like the faculty and staff really care about you as an individual while also encouraging you reach the goals you have set for yourself.

Favorite STEM memory:

My favorite STEM moment from Gavilan were the many fun nights I spent working on homework with friends in the STEM center.

Alawna Thompson

Graduated with an A.S. in Biology
Gavilan College 2021



McCay Rhodebeck

Graduated Gavilan College in 2021
A.S. Mathematics
A.S. Physics

The best thing about Gavilan College is... the community support from faculty and programs around campus. My success was a product of both the financial and educational support from the STEM Academy and EOPS, who provided me with counselors/mentors, internships, and life-long friendships. The tight-knit community at Gavilan generated a close personal experience that allowed me to be heard and accepted among my peers.

Advice for the future STEM Students?

Participate and you will be successful. The most important step you can take in advancing your education is to actively participate in it. Without my participation in the Calculus Academy, I would have never met the friends that pushed me to do the best I could. Active participation in programs, internships, and of course the classroom greatly benefited me and I'm sure it would benefit you as well.

Favorite STEM memory:

The creation of special Friday themes such as Fancy Friday where we would all dress fancy and drink different types of tea. The trend continued to grow when the gym bros of the Math department created Tank Top Friday. These kinds of events made working in STEM very special.

Life Before Gavilan College MESA:

Before being accepted into MESA, I was lost due to the lack of academic guidance. After joining the program, I received academic clarity as well as a welcoming community that is very supportive of my academic success. I have also been exposed to many summer internship opportunities. One such opportunity was being able to complete a six-week internship at Stanford University School of Medicine this past summer.

What does MESA mean to you?

MESA means family because of the great support system that is the backbone of this program. I am grateful for the amazing people that I have met who have helped shape me into the person I am today.

Advice for the future MESA/STEM Students?

My advice for the future MESA/STEM students is to never let an opportunity such as an academic conference, summer internship, or workshop, ever pass you by. These opportunities are made to students grow academically and possibly only be offered once in a while



Mikayla Gomez

Major: Biology (Pre-Med)
Transfer School: UCLA

Technology and Information Management major at UC Santa Cruz

"The STEM Academy was... instrumental in my success at Gav. The support and community helped me keep moving toward my degree when my classes got hard. I never felt alone in my struggles as a student, and I was able to pass classes I never thought I'd even pass the prerequisites for. I can honestly say that the best part of my time at Gavilan was being a part of the STEM Academy. My advice to anyone interested in getting a STEM degree at Gav would be to join the Academy and stick with it."



James Barnson

Graduated from Gavilan in 2021 with a Natural Sciences Associate's degree



Miranda Herrington

Graduated Gavilan College and Transferred to San Jose State University

Graduated Gavilan in Spring 2020 with:

A.S. Biological Sciences
A.A. Natural Sciences
Certificate in Communications

Transferred to SJSU Fall 2020

Major: Ecology and Evolution
Expected Graduation date: May 2022

Advice for the future STEM Students?

My advice to a student interested in a STEM field is don't be afraid to take a class in a different field of study even if it doesn't fulfill a graduation requirement. You'd be surprised how different fields can intersect or provide you with a new way of thinking about concepts in your own field.

Favorite STEM memory:

My favorite STEM moment from Gavilan was staying late in the STEM Center with my friends to study for an upcoming physics exam while eating food from the cafeteria and introducing them to the culinary masterpiece that is sweet potato fries with ranch. The best thing about Gavilan College is the connection and comradery I felt as a STEM student and as a math and biology tutor in the Math Lab and STEM Center. Some of my closest friends are those I made during my time at Gavilan and this college will always have a special place in my heart.

Currently working on Mathematics B.S. at UC Davis, Expected Graduation Spring 2023

"The best thing about Gavilan College is the community of staff, students, and clubs!"

Advice for the future STEM Students?

My advice to a student interested in a STEM field is explore what you're interested in and build habits of success now that will last into your future.

Favorite STEM memory:

My favorite STEM moment from Gavilan were the many fun nights I spent working on homework with friends in the STEM center.



Anthony Mendoza

Graduated Gavilan in Spring 2021
Physics AS-T and Music AA

Joshua Medina

Graduated Gavilan College Spring 2022 with an A.S.-T. in Computer Science
Currently finishing his B.S. at San José State University, Expected Graduation date is Fall 2024



The best thing about Gavilan College is... the personalized attention from instructors, and its commitment to student success.

My experience at Gavilan College was... Excellent. I found the professors were knowledgeable in their field and took pride in their work.

What I love about working in software engineering is... the ability to apply my creativity to problem-solving real-world challenges.

My degree in computer science has opened up the opportunity for internships where I can further develop my skills as a programmer.

My advice to a student interested in a STEM field: My advice is to be curious and passionate about their subject, seek out mentors and role models and take advantage, on and off campus, of opportunities to gain hands-on experience in the field they want to pursue.

My favorite STEM moment from Gavilan: All the great friends I made while I was a part of the STEM Academy.



Mason Hyland

Graduated Gavilan in June 2010 with AS in Biology, transferred to UCSC

- **Graduated from UCSC in June 2012 with BS in Ecology and Evolutionary Biology**

My experience at Gavilan College was... fundamentally formative in my path towards a career as a natural resource manager, and in my personal life with all the connections and friendships that were made while I was there.

What do you like about working in STEM?

What I love about working in natural resource management is the direct connection the work has to our local communities. In this field we're able to see the difference we make, whether it's threatened frogs returning to somewhere they've been absent for decades, or simply watching native bees pollinating flowers in a restoration site. It's all incredibly fulfilling.

Advice for the future STEM Students?

My advice to a student interested in a STEM field: Explore what's out there for you. A place like Gavilan College allows you to take classes in so many different fields, helping you find what really interests you the most. The most satisfying thing you can do is find something you love that serves both you and others around you, and work really hard to be very good at it.

- **BS Computer Science, SJSU, 2016, Systems Support Manager**

The best thing about Gavilan College is... the MESA/STEM program.

My experience at Gavilan College was... a little rocky at the start, then everything became crystal clear after I joined the MESA/STEM program.

My favorite STEM moment from Gavilan:

There are so many, but my favorite would be the people in the MESA/STEM program (students, staff, and professors). And also the internship opportunity that STEM offered.

How has your degree helped you?

My degree in Computer Science has allowed me to work at my dream companies.

Advice for the future STEM Students?

My advice to a student interested in a STEM field: never quit or give up what you want to achieve.



Sokthea Mov

Graduated Gavilan in 2013 with AS in Computer Programming

- **Currently studying Biomedical Engineering, San Jose State University, Expected to graduate Dec 2022**

Occupations: Undergrad Research Assistant, SSCL Chemistry Department, Clinical Engineering Associate at Stryker DI, Jabil Scholar Intern R&D (Senior Project)

"The best aspect of Gavilan is... the community built by the teachers and tutoring centers. They are student focused and incredibly involved in student success with excellent opportunities in STEM. The STEM programs provided by Gavilan are a fantastic starting point for students and a way to gain experience in STEM environments. The programs allow students to grow valuable skills which will be of great use for career success. My experience with the STEM program at Gavilan gave me great confidence to continue pushing myself to gain new opportunities with the skills I had learned."



Grace Drew

May 2020 transfer year, AS Physics, AS in Life Science from Gavilan College



Dr. Joshua Sanchez

Graduated Gavilan in 2010 with an AA Biology

- **BS degree in Microbial Biology, UC Berkeley 2013**
- **Western University of Health Sciences, 2019 Dentistry**

Graduating Gavilan in 2010 to pave the way for his career in dentistry. Josh was very active in STEM student clubs and community activities when he was a student at Gavilan.

The best thing about Gavilan College is... the community and professors who care about your education

My experience at Gavilan College was... The foundation I built my career from. I found my love for science and medicine.

How has your degree helped you? My degree in dentistry has allowed me to help those in our community and mentor others pursuing health fields

Advice for the future STEM Students? Don't worry about the time. I spent 4 years at Gavilan getting prepared to transfer to UC Berkeley. Remind yourself to enjoy learning sciences.

Joseph Carey

Graduated Gavilan College in May 2022 with an A.S. degree in Computer Science and Information Systems
Expected to graduate in May 2024 with a B.S. degree in Computer Science with Networking and Security
Currently part-time Gavilan College STEM Center/Math Lab staff and web developer

The best thing about Gavilan College is the variety of opportunities that come from instructor and student interactions. I obtained valuable skills in projects that were connected to talking with some of my instructors and classmates to get my foot in the door with software development and cybersecurity. **I recommend** people connect with their peers to obtain valuable entry-level skills in the field they are interested in.

My experience at Gavilan College was excellent! Ever since I started in the Fall of 2018, I have wanted to learn about my field of study and bring opportunities to my peers. I've worked on projects and been involved with clubs such as the Computer Science and Gavilan Engineering and Research (GEAR) club, which brought me to having valuable skills from projects and internships. Additionally, I had the opportunity to become a student worker in the Career/Transfer Center, and then later in the STEM Center as a STEM tutor, and as I worked with students, I got a sense of the community and where I can contribute to student success. I still am currently experxing Gavilan as a staff member and working on websites. **What I love about working in the Gavilan STEM Center is** that I get to work with a variety of students and help to share my success with them. I like tutoring students, and also maintaining the website for the STEM Center. This experience goes towards reenforcing my education in computer science, and helps me practice my skills. **My degree in computer science allows me** to explore opportunities and participate in my dream job of being in cybersecurity and software development. Computer science has a variety of different subfields, and cybersecurity is one that is impactful on my academics. On top of that, **participating in clubs** with my degree helps for collaboration for my work in the future after I obtain my degree. **My advice to a student interested in a STEM field is to join a club** and learn about projects to build skills. Additionally, talk with instructors to get started in building skills now for internships and experiences towards a dream job. **My favorite STEM moment at Gavilan is** being a part of a growing community and giving back to students from my success. I like to give the tools for others to be successful, and take advantage of opportunities that allow one to grow in their field.



Alan Swensen

Graduated Gavilan Spring 2020
AA in Computer Science and Natural Science

Currently studying Mathematics/Economics at UCLA, Expected graduation date December 2022

The best thing about Gavilan College...

is the environment. I loved going to school at Gavilan, The Professors want the students to succeed and learn the material. The other students are very willing to work together and collaborate on homework assignments. With the absolute best part being that after a whole day of studying you can take a short walk and forget that you are in school and sit in nature with all the trees and wildlife.

My Advice to a student interested in a STEM Field:

STEM majors are hard, and mistakes are very common, however, do not let this discourage you. You have a lot more support than you may realize. Prioritize going to office hours, so few students even go so you may even get lucky and get some one-on-one time with the professor. This is especially important because they will be grading your exams so go to office hours and get a feel for what material you should focus on for the test.



STEM Academy members share their challenges and successes to faculty and peers in a supportive academic atmosphere.



Melinda Soares - Astrophysicist

- AA degree in Liberal Studies from Gavilan College
- Transferred to the University of California Santa Cruz, 2008
- BS in Physics, UCSC, 2014
- Masters in Astrophysical Sciences, Princeton University, 2016
- PhD in Astrophysical Sciences, Princeton University, 2020
- University of Wisconsin-Madison Postdoctoral Fellowship 2020-2021
- NASA Hubble Postdoctoral Fellowship 2021-2024

"There are nearly 1,000 community colleges in the United States, together serving over 12 million students. These institutions provide a critical public service, allowing students to embark upon their educational goals in a radically supportive environment and without the debt burden that would accompany enrollment at a traditional university. As a student at Gavilan College, I laid the foundation for my career as an astrophysicist. This is true both in terms of the early technical training I received in physics and mathematics, as well as the professional mentoring that was provided by dedicated instructors like Marlene Dwyer, Elena Dachkova, and Ken Wagman. As a first-generation college student, the community of peers and advisors I found in Gavilan College's Mathematics, Engineering, Science Achievement Community College Program was instrumental to my success, inspiring me to envision a future for myself as a scientist. If I had to summarize the "best" thing about Gavilan College, I would have to say it is the college's resounding commitment to equitable, accessible, and transformative educational outcomes. This is made possible by the exemplary instruction (the best I've received to date), idyllic natural setting, and collegiate cultural environment. In a world abound with empty mission statements and virtue signaling, Gavilan College is a rare place where educators are actively living their ideals of democratic citizenship and the pursuit of educational excellence. Gavilan College campus still feels like home when I visit today, and somehow this familiar, comfortable setting never ceases to inspire me to be a better, more interdependent version of myself."