Fall 2021 Webinar Responses

C.A.S.E. Academy

OVERVIEW OF FALL 2021 WEBINAR RESPONSES

The survey instruments were designed to assess the quality of the presentation, as well as determine the alignment of the presentations with goals of CASE Academy to provide programming that matches students' interests, and provides meaningful content to support career motivation and preparation. The 11 items of the survey instrument were grouped into three categories to support the analysis of the results. 1. Quality of presentation 2. Student interest and career preparation 3. Student career motivation and efficacy.

RATING OF WEBINARS

The highest ratings consistently were given to the quality of the presentations that were offered. Students also indicated that the content and the delivery format provided them opportunities to learn about company culture and business areas for the various companies presenting. The webinars provided information to broadened their knowledge about career options, thus serving as a sense of motivation to complete their degree of study.

BENEFITS OF WEBINARS CITED BY STUDENTS

Students indicated they were provided opportunities to learn application of technologies like blockchain, drones, sustainability, artificial intelligence and machine learning. Many indicated this was eye-opening as the coursework for their major didn't provide the same options for seeing real world application. They also felt that the professional development information was very insightful and thought provoking to guide their preparation for career opportunities, both for internships and full time employment. Students are finding tremendous benefit from these presentations. (See Appendix 1 for examples) The main benefits that students highlighted were:

- The presenters connected well with the students and provided feedback they found relevant and very thorough.
- The recommendations provided on how to have an effective engagement with a recruiter was beneficial to students.
- Networking, developing communication skills and exploring career opportunities information shared with students was deemed to be very valuable.
- The sessions provided insight into a mentorship program, company's expression of care, opportunities that the program provides and relatability of the presenters.
- Students found favor with the presentation format that allocated a significant portion of the session to Q&A.
- Students benefited from hearing about in-depth issues regarding career preparedness they had not heard before and provided motivation for them to seek out additional resources to inform their career options.

RECOMMENDATIONS FOR FUTURE WEBINARS

Student provided suggestions for future workshops with a good balance of topics that are technical in nature and those that will focus on professional development content. These suggestions are listed in Appendix 2.0 and can be used to guide programming for the upcoming academic term. As we continue to enhance the engagement experience for scholars and presenters, the following recommendations are suggested:

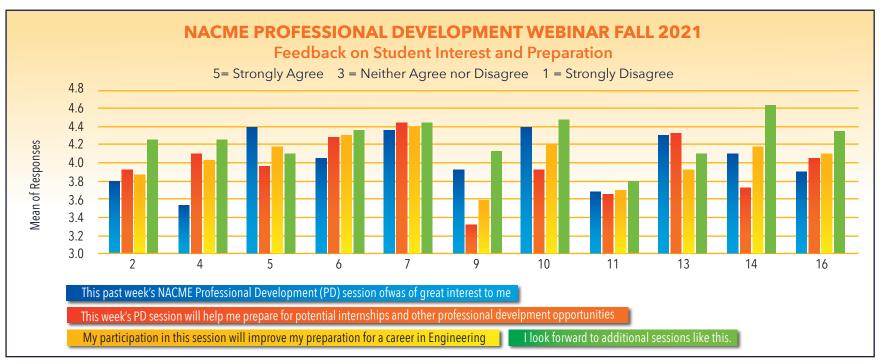
- Presenter will be encouraged to allocate a significant amount of time for Q&A
- Presenter will be encouraged to share personal experiences with the audience
- When providing perspectives on a topic try to also include testimonials from students that are similar to the academic classification
- Design content to promote active learning for participants (polls, breakout groups, call and response, etc.)



Fall 2021 Webinar Listing Analytics

Webinar #	Date	Time (ET)	Event (virtual unless specified)	Lead Sponsor	Student Participants Registered/Attended	Survey Responses (Rate)
1	16-Sep	2:00pm	Virtual Career Fair and Board Showcase	Board of Directors		14
2	22-Sep	4:00pm	Mentoring in a Global Society	Globant	135/122	34 (28%)
3	23-Sep	8:00am	AISES: Scholar Networking Breakfast (Phoenix)	TBD		
4	29-Sep	4:00pm	Engineeringin a Digitized World	ВР	180/154	15 (9.74%)
5	6-Oct	4:00pm	Sustainability: "Grow, Conserve and Care"	Air Products	106/98	13 (13%)
6	13-0ct	4:00pm	Motion Technology	IΠ	135/119	39 (33%)
7	20-Oct	4:00pm	Strategic Networking	Ford	139/115	37 (32%)
8	21-Oct	7:30am	SWE: Scholar Networking Breakfast (Indianapolis)	Phillips 66		
9	27-Oct	4:00pm	Drone Technology	Bechtel	135/119	22 (18%)
10	Oct 27	7:00pm	Intro to Al	IBM	80/63	19 (30%)
11	3-Nov	5:00pm	Blockchain	Globant	110/87	25 (28%)
12	Nov 3	7:00pm	Hands-on Intro to Al	IBM	49/36	4 (11%)
13	10-Nov	4:00pm	Development Cards	Autodesk	113/81	19 (23%)
14	Nov 10	7:00pm	Cybersecurity	Microsoft	56/42	14 (33%)
16	17-Nov	4:00pm	Acing Technical Assessments	P&G	145/119	20 (17%)

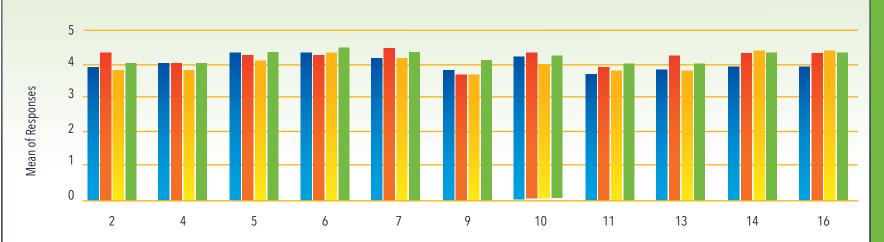




NACME PROFESSIONAL DEVELOPMENT WEBINAR FALL 2021

Feedback on Student Motivation and Career Efficacy

5= Strongly Agree 3 = Neither Agree nor Disagree 1 = Strongly Disagree



This week's PD helped me think about potential career opportunities

This session will help me as I explore other courses and professsional development opportunities

This week's PD session helped deepen my commitment to finishing y degree



MEAN OF RESPONSES INDICATING AGREEMENT WITH STATEMENTS ABOUT WEBINARS

Webinar #	2	4	5	6	7	9	10	11	12	13	14	16
# of Survey Responses	33	14	13	38	35	22	19	25	4	19	14	20
This past week's NACME Professional Development (PD) session was of great interest to me	3.85	3.57	4.46	4.1	4.43	3.95	4.42	3.72	4.25	4.35	4.14	3.95
This week's PD helped me think about potential career opportunities	3.91	4.14	4.38	4.36	4.26	3.86	4.16	3.72	4	3.9	3.92	4
This session will help me as I explore other courses and professional development opportunities.	4.27	4.07	4.31	4.33	4.57	3.73	4.32	3.84	4.25	4.26	4.31	3.7
This week's PD session will help me prepare for potential internship and other professional development opportunities	3.97	4.14	4	4.32	4.49	3.36	3.95	3.68	4	4.37	3.77	4.1
This week's PD session helped deepen my commitment to finishing my degree	3.88	3.93	4.15	4.39	4.26	3.77	3.95	3.8	4.5	3.84	4.38	3.85
This session helped motivate me for a successful career in engineering	4.12	4.07	4.46	4.55	4.46	4.18	4.26	3.96	5	4.05	4.31	4.2

Motivation and Career Efficacy

Student interest and preparation

MEAN OF RESPONSES INDICATING AGREEMENT WITH STATEMENTS ABOUT WEBINARS

Webinar #	2	4	5	6	7	9	10	11	12	13	14	16
# of Survey Responses	33	14	13	38	35	22	19	25	4	19	14	20
The presenter for this session was well-prepared.	4.67	4.5	4.62	4.71	4.71	4.5	4.68	4.24	4.75	4.26	4.64	4.45
The presenter for this session was well-informed	4.73	4.5	4.69	4.63	4.74	4.5	4.74	4.44	4.75	4.47	4.79	4.6
The presentation was well-organized	4.63	4.43	4.77	4.63	4.69	4.41	4.63	4.26	4.75	4.11	4.57	
My participation in this session will improve my preparation for a career in Engineering	3.91	4.07	4.23	4.37	4.43	3.64	4.26	3.72	4.5	3.95	4.23	4.15
I look forward to additional sessions like this.	4.3	4.29	4.15	4.42	4.49	4.18	4.53	3.83	4.75	4.15	4.69	4.4

Student interest and preparation

Presentation Quality



APPENDIX 1 LIST OF SUGGESTED TOPICS FOR THE FUTURE

Listed below is a collection of topics suggested by participants for future webinars. There is a good balance of topics that are technical in natures and those that will deliver professional development content.

TECHNICAL TOPICS

Medical research and computer science research topics.(2)

"Computer Hardware/Software Aerospace/Aviation, space exploration (3)

Additive Manufacturing"

Transportation design/planning, urban planning/development, sustainability, resilience, renewable energy and sustainability (4)

Community service through engineering

Navigating careers in sustainability, energy, and environmental justice through an engineering/tech lens

Artificial Intelligence, Machine Learning, Cyber security (3)

Data analytics and communication with customers.

The innerworkings of being in a mentorship and the many examples that represent them.

Mechanical engineering, bioengineering

I am most interested in topics that involve chemical engineering and process engineering. (2)

Project management

Entrepreneurship

Internships, Opportunities and Success (3) New software/technology for industrial use

PROFESSIONAL/PERSONAL DEVELOPMENT

Diversity, Equity and Inclusion in the workplace (2)

Engagement with companies and Networking events (2)

Motivation and confidence building.

Linked-in profile development and networking strategies. (4)

Creating your Brand and appropriate social media presence

Workforce ready skills (2)

Mentoring opportunities

How to be a good leader/ working on interpersonal relationships with others in the workplace. (3)

Graduate student panels, career fairs, and visits from different engineering companies to campus.

Internship opportunities.(4)

Establishing relationships with network and mentors (2)

Skills important for leadership roles (2)

Resume workshops, interview prep, elevator pitch (2)

Corporate engagement and follow-up, sustaining connections

Networking, diversity, mental preparation, and adaptation

Career opportunities.

Technical interview skills and tips

What to do in your last year of college to prepare for full time roles

Learning how to stay motivated and build confidence Interviewing, personal growth, decision making

Becoming your own advocate

APPENDIX 2 BENEFITS FOR EACH SESSION

September 16 -Virtual Career Fair

The main benefits that students highlighted were networking, developing communication skills and exploring opportunities.

Theme	Example 1	Example 2
Networking	It was really beneficial being able to meet with many different companies and seeing how they operate and what they are looking for when they are recruiting.	I was able to meet with recruiters from compa- nies I am interested in.
Develop Communication Skills	Being able to exercise speaking with recruiters.	N/A
Explore Opportunities	Being able to talk to a multitude of companies to gauge my interest in those fields	Learning of the opportunities that are being created/provided

highlighted were that this mentorship program, company's that the program provides and

Theme	Example 1	Example 2
Insight in mentorship program	I enjoyed hearing about the new mentorship opportunities that NACME is providing its scholars. Although the company Globant is tailored more towards digital and technology based majors, it was great to hear how a connection between the mentor and mentee would form. (what steps would be taken to ensure a successful professional relationship, and so on.)	The most beneficial aspect of today's Professional Development session was seeing the feedback/quotes that former mentees provided. Most of them mentioned how they enjoyed the work and their mentors. Seeing these honest feedback lets me know that the company is worth looking at.
Company's expression of care	I really liked how the presenter not only gave information about the company, but also ways the company participates in mentorship. It shows that the company cares about uplifting students educationally.	Informing students about how open the program is to NACME students was reassuring.
Program opportunity	I thought the most beneficial aspect of the presentation was the programs and opportunities the presenter shared that were available.	I think that making all of the attending NACME scholars aware of opportunities I ike this is really beneficial.
Presenter Relatability	I thought the most beneficial aspect of the pre- sentation was the programs and opportunities the presenter shared that were available.	I appreciated the presenters honesty and she was very genuine

September 29 -Engineering.... in a Digitized World

The main benefits that students highlighted were that this session provided valuable advice, expanded the digitized view on engineering and outlined future opportunities.

Theme	Example 1	Example 2
Presenters advice	Being able to hear Keisha's background and how she ended up at BP. I also appreciated the advice and guidance Keisha was able to give to the participants during the session.	I found all of it very helpful.
Topic of digitized engineering	Understanding the digital aspect to engi- neering and having the goal of becoming a net zero company	I liked learning about how engineering works from a global, digitalized perspective
Future opportuni- ties	Understanding that you can move within a company and continuing to learn outside of the academic world.	I think that making all of the attending NACME scholars aware of opportunities I ike this is really beneficial.

highlighted were learning about

Theme	Example 1	Example 2
Future Plans	The most beneficial thing I learned is that although I may graduate with a chemical engineering degree does not mean I have to stick with that degree for my occupation.	Most beneficial aspects were the fact that they talked about safety within their careers. A lot of people forget that you need to protect yourself when working and I think that is a very important factor when working.
Practical Industry Insight	Learning about AirProducts core values and their involvement in sustainable development.	It was awesome hearing more about sustainability and the non-traditional career path that Mrs. O'Brien took and her experience in both!
Presenter Relatability	I enjoyed how Julie was articulate in her presentation and was able to cover the essential topics about Air Products. It was also great to hear how passionate Julie is about sustainability!	The most beneficial aspect was the q&a with a professional in a field that I am interested in.

October 13 -**Motion Technology**

The main benefits that students highlighted were the opportunities to hear from experienced project managers and the first hand account of the internship experience shared by students. They also enjoyed learning about analyzing data and iAlert

Theme	Example 1	Example 2
Insight into internship experience	A beneficial aspect of today's Professional Development session is learning about the opportunities that interns can engage in.	The emphasis on what interns have and will accomplish through this opportunity.
Insight into company of interest	Learning about AirProducts core values and their involvement in sustainable develop- ment	I would say the most beneficial aspect of todays professional development session was learning how this company made iAlert to help users of the product identify issues with theirs tools automatically, This will say a lot of money and a lot of timeto help users of the product identify issues with theirs tools automatically, This will say a lot of money and a lot of time.
Practical Experience	I really enjoyed how they shared some of their experiences.	Hearing from experienced project managers.
Opportunity to learn something new	Learning about analyzing data and hearing of advances in the statistical field.	The amount of beneficial work that they do. They talked about a pump issue that was occurring at 2:30 pm everyday for a client and that the issue was that someone was shutting a valve off. They had to use their technology and common sense to figure that out and not lose profits on warranty.

For this webinar, students found favor with the presentation The presenter connected well with the students and provided feedback they found relevant and very thorough. The recomhave an effective engagement with a recruiter was beneficial to

Theme Example 1 Example 2 Good explanation on how to explain why you Most beneficial aspects were the fact Presenters advice may not have internship experience. For that they talked about safety within their example, instead of work, did you start careers. A lot of people forget that you need to protect yourself when working and I a business, did a summer course, or did think that is a very important factor when research. working. Made me more confident on how to answer interview questions related to my experience Format of I liked that there was a brief intro presenta-Lloved the O & A session! Shani Allison was tion. I think for this type of topic it was nice presentation a great presenter and answered questions allowed students to have a lot of time for questions. thoroughly! to engage with presenter

Oct 27, 4 pm

The main benefits that students highlighted were that this session provided perspectives on career opportunities and applications of drone technology. They also like the fact that several different presenters were a part of the session and offered a diverse perspective on their work activities.

Theme	Example 1	Example 2
Career Opportunities	My career search broadened as I was intro- duced to many things I was never made aware of that I could study and work towards.	More insight into career work and exploring lesser known career paths
Drone Technology	Learning about drone technology	I was able to explore a hobby that I have as Drone flying can be used in a real job.
Presentation format	I think it was very informative and I liked that the different presenters got to share a bit of their story and experi- ence with the company.	That all three presenters provided their respective inputs and personal experiences within the company. I also enjoyed that the panel took the time to answer our questions (even past the scheduled time).

highlighted were the high level of engagement of the

Theme	Example 1	Example 2
Presenter engagement	I really liked how Miguel, Darrel, and Samuel all gave insight into what they do and shared how AI plays a role in their respective fields. The answers they provided were very informative. Not only were they professional, but they were also friendly and interactive with the audience.	It was super interesting to get first hand insight onto what AI really is. I really enjoyed seeing 3 different perspectives for each question.
Learning about AI	Showing us how to sign up for the IBM cloud and how to use it to learn more about Machine Learning.	In this session I learned a lot more about how AI is used in the world and different aspects in which you can work with AI

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The main benefits that students highlighted were the high level of engagement of the presenter and the opportunity to learn more about artificial intelligence and machine learning.

Theme	Example 1	Example 2
Relevant Experiences	The presenter was able to give relevant real world experiences	A deeper understanding in blockchain and Ethereum will help me on my way to better understand the new age of currency. Also learning about blockchain and NFT transactions.
Introduction to new information	He made me want to look into Crypto more and see what it's like.	I enjoyed learning about the blockchain software ide, it was very intriguing to see since I am a computer science major myself.

November 3 -**Hands-on Into to Al**

The main benefits that students highlighted were the high level of engagement of the presenter and the opportunity to learn more about artificial intelligence and machine learning.

Theme	Example 1	
Dive deeper into a topic of interest	Learning more about A.I.	
Key insight into host organization	Showing us how to navigate through the IBM account was helpful	
Hands on experi- ence	The most beneficial aspect of this session was all the links they posted in the chat which allowed us to learn with hands-on experience.	

Theme	Example 1	Example 2
Insight into job opportunities	The presenter was able to give relevant real world experiences	A deeper understanding in blockchain and Ethereum will help me on my way to better understand the new age of currency. Also learning about blockchain and NFT transactions.
Soliciting Participation	He made me want to look into Crypto more and see what it's like.	I enjoyed learning about the blockchain software ide, it was very intriguing to see since I am a computer science major myself.
Preparation	The mock interview questions were very helpful.	Today's presentation helped a lot with learning about how to approach workplace problems as well as how to answer when in an interview.
Constructive Feedback	I really enjoyed the feedback for every answer no matter the type of question.	I got feedback from what I said for my mock interview and I greatly appreciated his advice for the future.

November 10 -**Cybersecurity**

Theme	Example 1	Example 2
Supportive Environment	Alejandra reminded us that we do not need to know everything. Encouraged us to ask questions and ask others for help when necessary.	Very interactive
Opportunity for deep thinking	It was interesting to be able to hear about deeper issues we may not be regularly thinking about.	Today I have learned more about the security risks that are involved in my everyday life than I have in the past 19 years of my life. There are so many risks that I take on everyday when I am on my phone or laptop and it is great to learn more about them so that I can prevent them.
Provide strategic advice/examples	The most beneficial aspects of today's PD were there presenter's input on her personal experience breaking into the cybersecurity industry and how long it took for her to get computable as well her connecting cybersecurity to tech and stuff we use or overlook everyday.	She described what it was like to be new in the engineering field and gave some tips to be successful regardless of your knowledge in your respective fields.

