

Welcome to AIMS² 2.0(HSI-STEM Grant) Bridging the Gap: Enhancing AIMS² for Student Success



*Johnson
Auditorium
Sep 22, 2017*



AGENDA

- Welcome and Introductions
- Overview of program - Ramesh
- Activities
 - Cohort Meetings w/faculty mentors
 - Tutoring/Mentoring
 - Research Projects for Cohort Students
- View CECS Student Video
- EMS Survey
- Questions



Project Web Site

www.ecs.csun.edu/aims2



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The AIMS² Project - \$ 5.5 Million Grant from USDE (2011-16) Attract, Inspire, Mentor, and Support Students



**Faculty and Staff from the College of the Canyons, Glendale CC,
& the College of Engineering and Computer Science, CSUN**



• Cohort 5



- Cohort based model
- Collaboration between CSUN and CCC's
- High Transfer Achievement
- GPA, Persistence, and Graduation
- Served over 240 transfer students (approximately 67 % Latino/a).

For more information

Visit www.ecs.csun.edu/aims2

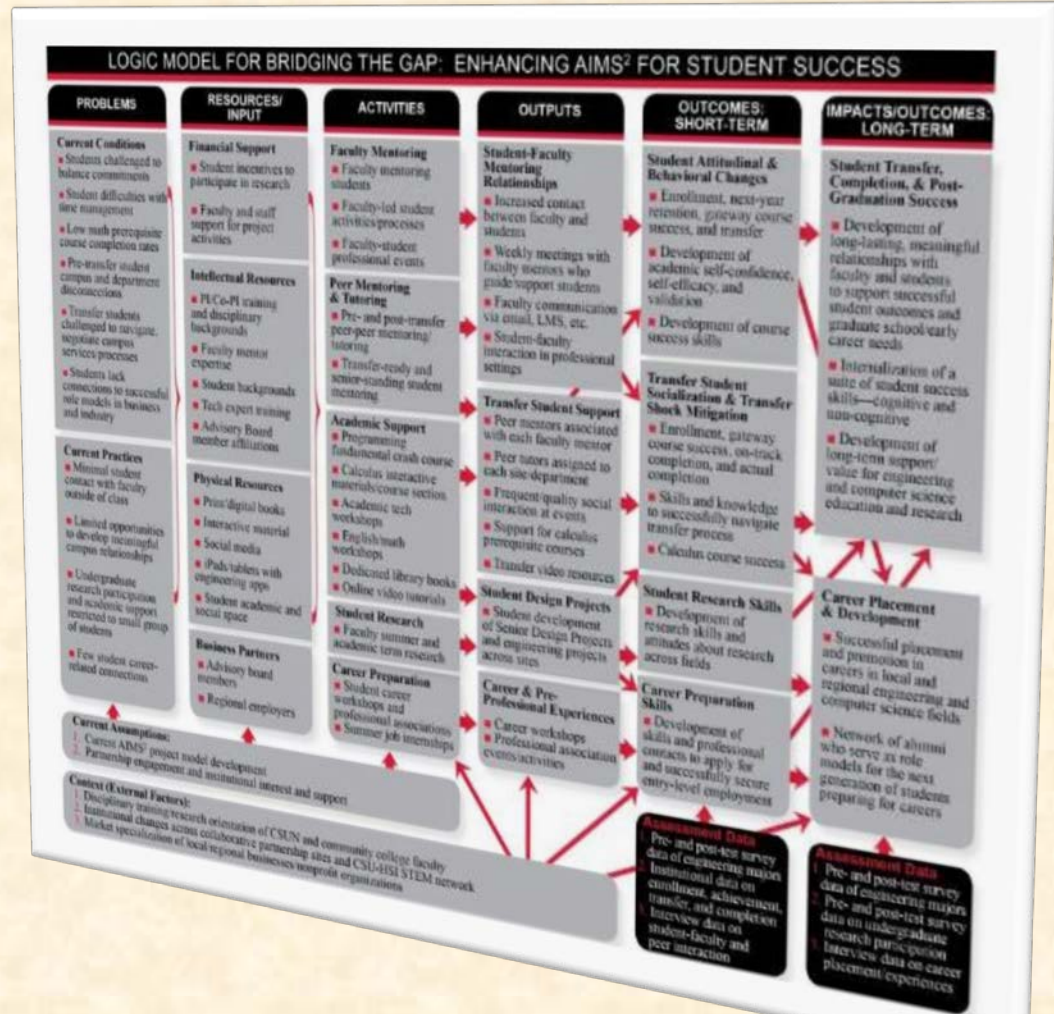


WHITE HOUSE INITIATIVE
on EDUCATIONAL EXCELLENCE for HISPANICS
25 Years of Fulfilling America's Future

Breaking News: Just received Year 2 Funding for \$ 1.19 Million

“Bridging the Gap: Enhancing the AIMS² Program for Student Success” - (2016- 2021)

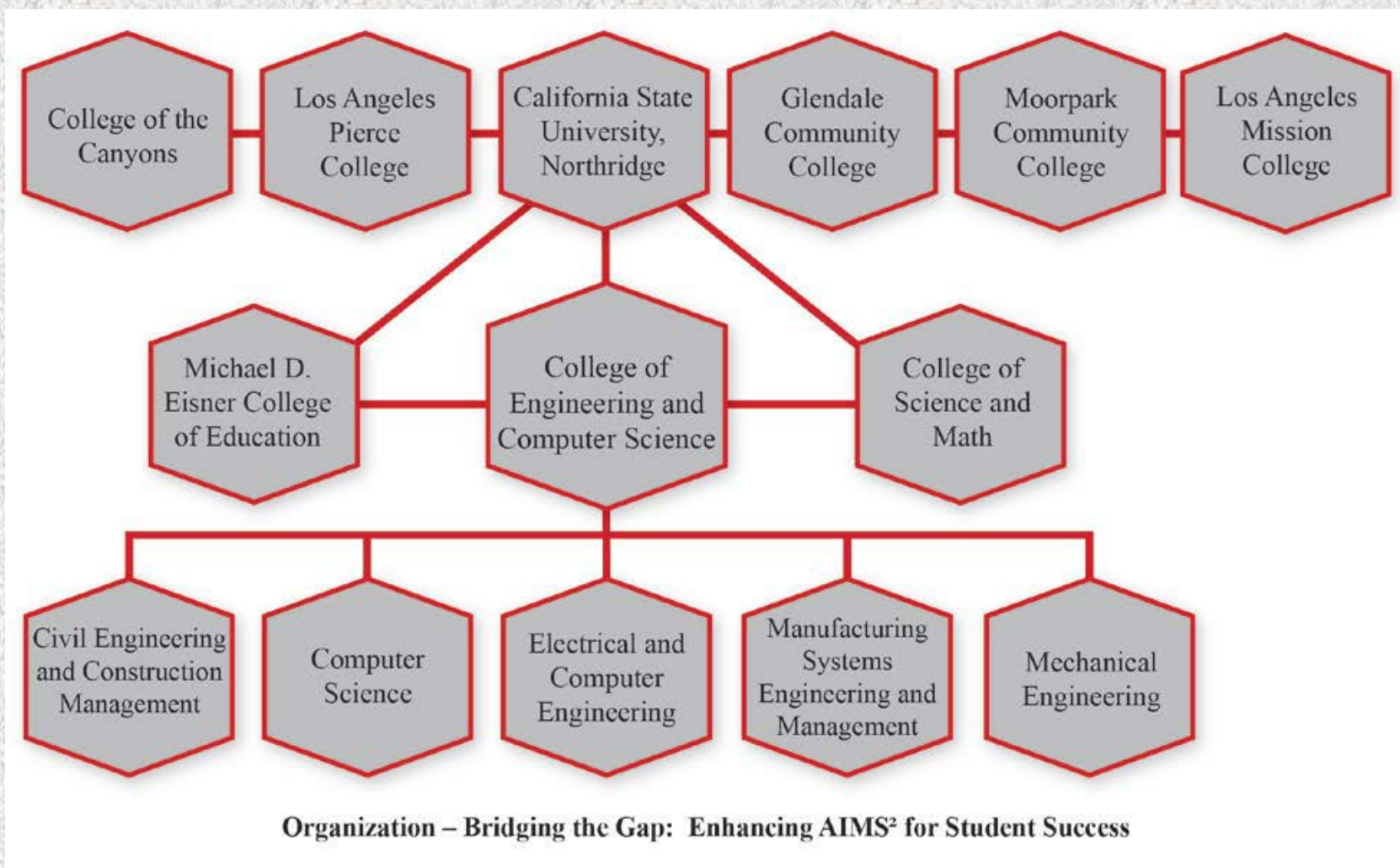
• Selected to receive funding under the HISPANIC-SERVING INSTITUTIONS PROGRAM (STEM) (84.031C). This grant was in the amount of \$1,199,483.00 for the first budget period (10/01/2016 through 09/30/2017). It is anticipated that the grant will be for a total of 5 year(s).



AIMS² Program – Nationally recognized

Funded by USDE : 2011-2016 (\$ 5.5 M), 2016-2021 (\$ 6 M)







Goals and Objectives

- Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.
- Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.
- Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.
- Improve career preparation of Hispanic and low-income students in engineering and computer science fields.
- Develop research skills of Hispanic and low-income students in engineering and computer science.
- Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.



Student Selection : CSUN

- To be eligible, STEM majors must be an individual who has faced or faces social, cultural educational or economic barriers to careers in STEM and be a US Citizen or Permanent Resident.
- Application including Essay and Interview
- **Enroll and complete a minimum of 30 units/year and passing all courses with grades of C or better**
- All students eligible to receive \$ 500 towards textbook awards every semester (fall/spring) upon meeting requirements
- Selected students eligible to participate in paid UG research activities (30-32/year)
- Tutors and Peer Mentors (Up to 10/year)



Column1	Year 1	Year 2	Year 3	Year 4	Year 5	Total funded over 5 Years
FTF	20	20	20	10		
Running Totals	20	40	60	70	70	260
FTT	30	30	30	30		
Running Totals	30	60	60	60	30	240
Annual	50	100	120	130	100	500

- Year 1 FTF cohort formed in spring 2017 (from FTF who entered in fall 2016)
- Year 1 FTT cohort formed in Jul 2017 (from eligible continuing students on 2011 grant)
- Year 2 FTF and Year 2 FTT cohorts formed in Aug-Sep 2017 (from FTF and FTT entering CSUN in fall 17)



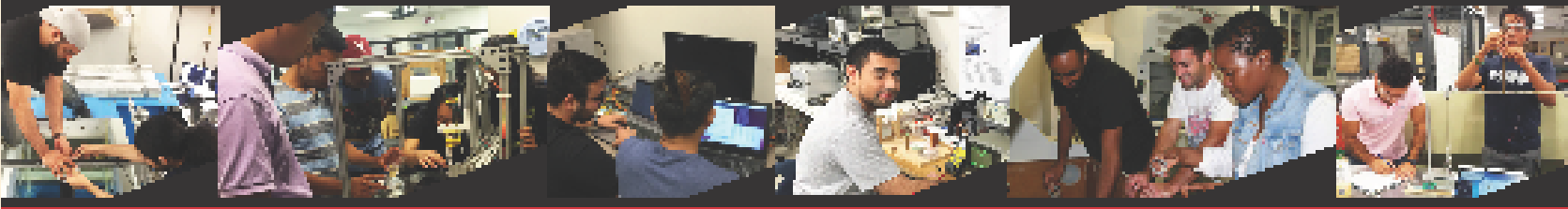
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Major activities in AIMS² grant

- Tutoring
- Mentoring
- Undergraduate research

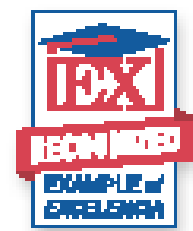


Please join us for the

College of Engineering and Computer Science

AIMS² STUDENT RESEARCH SYMPOSIUM

Wednesday, October 4, 2017
 3:30 - 6:30 p.m.
 USU Northridge Center
 California State University, Northridge
 18111 Nordhoff Street
 Northridge, CA 91330-8295



http://www.ecs.csun.edu/aims2/research_internships.html

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Summer 2017 Research Projects with CSUN Faculty Mentors

Department	Professor	Project Information
Civil Engineering and Construction Management	Dr. Anwar Alroomi and Dr. Tzong-Ying Hao	Click here for information.
Civil Engineering and Construction Management	Dr. Tadeh Zirakian and Dr. David Boyajian	Click here for information.
Computer Science	Dr. Vahab Pournaghshband	Click here for information.
Electrical and Computer Engineering	Dr. Ruting Jia	Click here for information.
Electrical and Computer Engineering	Dr. Bruno Osorno	Click here for information.
Electrical and Computer Engineering	Dr. John Valdovinos	Click here for information.
Manufacturing Systems Engineering and Management	Dr. Behzad Bavarian	Click here for information.
Manufacturing Systems Engineering and Management	Dr. S. Jimmy Gandhi	Click here for information.
Manufacturing Systems Engineering and Management	Dr. Bingbing Li	Click here for information.
Mechanical Engineering	Dr. Vidya Nandikolla	Click here for information.

U.S. Department of Energy, Office of Environmental Management: Minority Serving Institutions Partnership Program Internships

Quick Links

11:35 PM 5/9/2017



CSUN Project Activities

- **All the activities in the current AIMS² grant PLUS**
- Pilot and expand Calculus Lab (MATH 150 A/L)
- Summer UG research for selected students (up to 32 in Year 1)
- Early STEM program (Math Readiness) for all entering freshmen
- Freshman orientation program for all FTF in CECS in June led by Dr. Gandhi and AIMS² faculty

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE PRESENTS



2017



AIMS²

Attract Inspire Mentor and Support Students

SKILLS WORKSHOP

June 19 – 23, 2017



AIMS² Director Message



I am delighted to invite you to the third annual AIMS² Student Research Symposium at CSUN supported through a new collaborative grant under the 2016 HSI-STEM Initiative from the US Department of Education. We are thrilled to be selected for this sequel multi-million dollar grant which allows us to scale and institutionalize our ongoing work with the original program that was funded in 2011. Students in the AIMS² cohorts are supported and mentored by our outstanding faculty through numerous "hands-on" learning experiences. Our data clearly reveals that participation in undergraduate research projects connects students to their disciplines and builds career capital and practical skills marketable in their future careers. Turning to engineering, we have a number of global challenges in the world today: Food, Clean Air, Clean Water, Energy, Sustainability, Health Care, Transportation, Climate Change, Education, etc., Engineers continue to find innovative solutions to these global challenges that confront society. We have a workforce development challenge across the entire tech sector especially with the rapid advances in technology. We have an enormous challenge attracting and retaining students to study in the STEM disciplines. Programs like AIMS² provide adequate, appropriate, and timely opportunities for advancement for graduates in STEM disciplines. Diversity and Gender Equity are major challenges as well. Last but not least, I will take poetic license with the phrase, "To err is human. To forgive is divine" and say "To err is human, to engineer is divine, to educate is sublime". As leaders of organizations we have a responsibility to engineer and educate the next generation of leaders, unafraid to confront the challenges that they will encounter, firm in the belief that they have the technical and business skills and the intuition to succeed. Nothing succeeds like success. Success ultimately is the greatest legacy that inspires future engineers to celebrate their diversity and soar ever higher than they ever imagined. Don't miss this opportunity to see and hear firsthand from our outstanding AIMS² students. I am sure you will be impressed with the diversity and quality of their work and look forward to seeing you on October 4th!

S. K. Ramaswami
AIMS² Project Director and
Lead Principal Investigator



18111 Nordhoff Street • Northridge • California 91330-8295
www.csun.edu/ecs



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Questions?

Thank you for your attention!

Questions?

CECS Web URL:

<http://www.csun.edu/ecs/>

College e-Newsletter:

<http://www.ecs.csun.edu/ecs/enews>



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Engineering Majors Survey (EMS)

AIMS² Orientation

Sep 22, 2017

Andrea Montes Alvarado



Overview

- The online survey explores how AIMS² can design project activities and experiences to meet your unique needs as a student. It is about project improvement, not an assessment of you.
 - It is completely voluntary
 - It will take 10 -15 minutes
 - All questions must be answered before moving forward to the next section
 - At the end of the survey, there will be information about how to claim your free \$5 Matamoney card!



Welcome Page

California State University
Northridge

Welcome!

Thank you for participating in the **Engineering Majors Survey Fall 2017!**

The survey is designed to be completed in about 10-15 minutes. For the open-ended questions, feel free to elaborate as much as you would like, we welcome all responses.

Remember, after you reach the end of the survey, you find information on how to claim your free \$5 Matamoney card!

Thank you very much for your time in helping us to understand engineering majors today,

Your friends on the **Engineering Majors Survey team!**

>>

Survey Powered By Qualtrics



Participant Information Form

California State University
Northridge

PARTICIPANT INFORMATION FORM
Engineering Majors Survey (EMS) - CSUN
Student Participants

Purpose of the Study

The purpose of this study is to understand how we can best serve you as an AIMS2 program participant. The study explores how AIMS2 can design project activities and experiences to meet your unique needs as a student in engineering or computer science at CSUN.

AIMS2 Project Evaluation

You are being asked to participate in a research study conducted by Nathan Durdella, Ph.D., Associate Professor, Department of Educational Leadership and Policy Studies, California State University, Northridge (CSUN).

If you choose to participate in this study, you will complete a confidential survey about your AIMS2 program experiences and give permission to evaluators to access CSUN institutional data about you. This survey will help us learn more about the effectiveness of the AIMS2 program. The survey will take about 10 minutes to complete.



Participant Information Form

You will be compensated with a \$5 Matamoney gift card for your participation in this study.

You are eligible to participate in this study if you are at least 18 years of age or older and participate in the AIMS2 program.

You can skip questions that you do not want to answer or stop the survey at any time. The study data will be de-identified with the assignment of a random three-digit number. The de-identified data collected from this study will be used for research purposes and will be retained indefinitely.

The possible risks and/or discomforts associated with the procedures described in this study include mild emotional discomfort. The potential risks of this study involve no more than minimal risk. There are no known harms or discomforts associated with this study beyond those encountered in normal daily life. To mitigate risks, we remind you that they have the right to not answer any question or stop the survey at any time.

If you have any comments, concerns, or questions regarding the conduct of this research please contact Nathan Durdella at 818-677-3316 or nathan.durdella@csun.edu.

If you have concerns or complaints about the research study, research team, or questions about your rights as a research participant, please contact Research and Sponsored Projects: phone 818-677-2901 or email irb@csun.edu.

This study is voluntary. If you do not wish to participate, please close your browser window to exit the survey.

If you want to participate in this study, click "I agree" to begin the survey.

- I am 18 years of age or older and I agree
- I do not agree



Sample Questions

SECTION 1: CURRENT PLAN OF STUDY

In this section, we are interested in learning more about your enrollment status and degree plans.

What is your current academic standing?*

Please choose **only one** of the following:

- Freshman (0 - 29 units)
- Sophomore (30 - 59 units)
- Junior (60 - 89 units)
- Senior (90 - plus units)
- Other (please specify):

Are you enrolled primarily as a: *

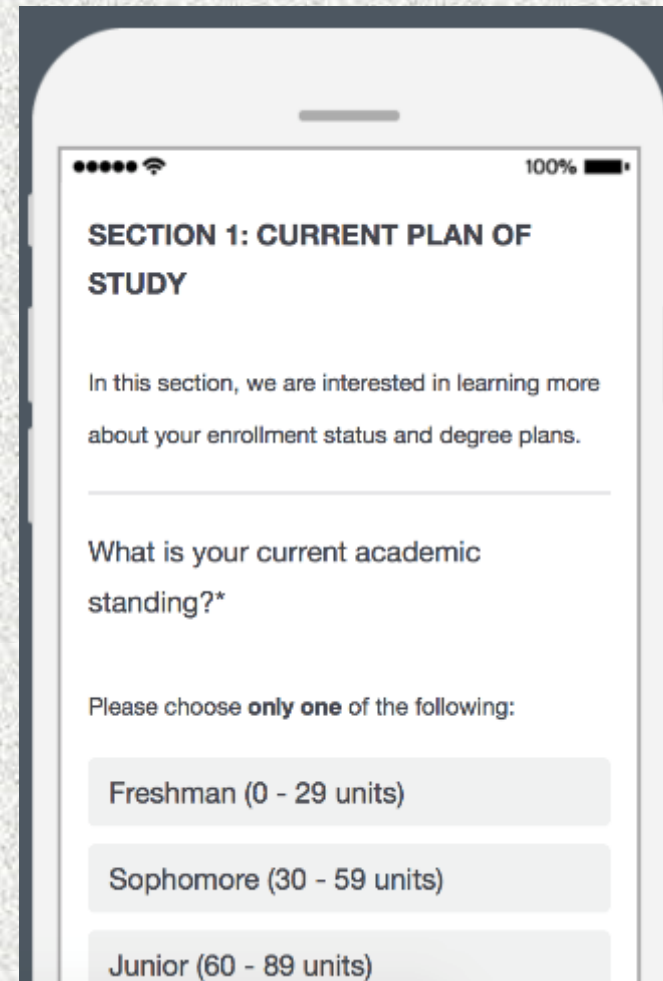
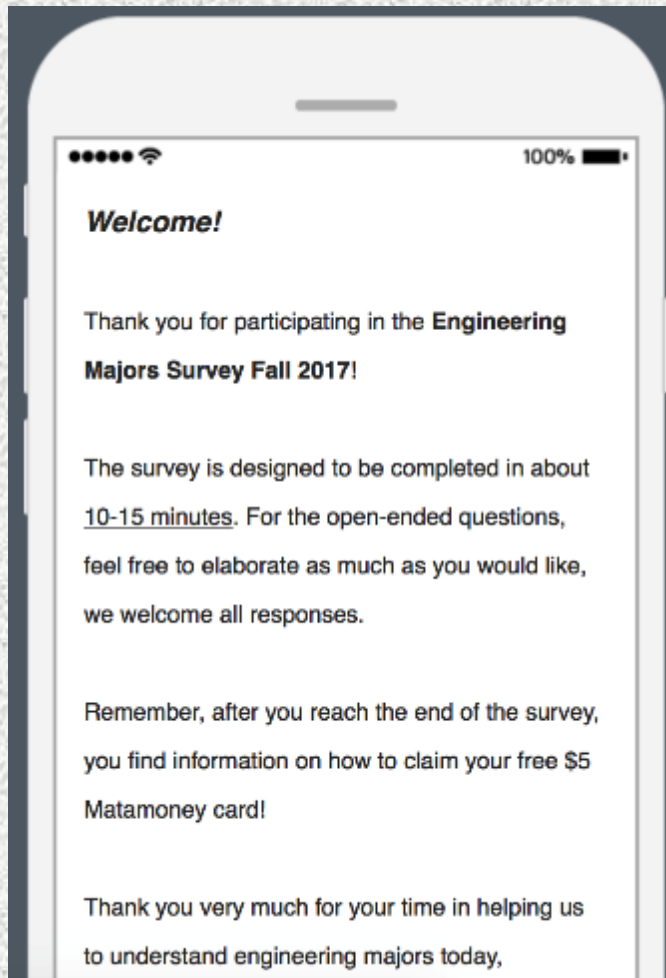
Please choose **only one** of the following:

- Full-time student
- Part-time student
- I prefer not to answer

Did you transfer to your current institution from another college/university? *



Mobile Phone Version





Questions?



Complete the survey now!

Please access the email invitation sent to you and click on the link. If you need a new link sent to you, please let me know.