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MESSAGE FROM THE DEAN

Hello,

The University of Kansas School of Engineering is a great place that provides students with some amazing opportunities as they become future engineers and computing professionals.

The Self Engineering Leadership Fellows Program is one of those outstanding opportunities. Through a generous donation from Al and Lila Self, the KU School of Engineering is able to provide an unparalleled leadership enrichment program. Each year, the program welcomes about 25 inspired high school graduates to take part in a four-year leadership and development curriculum that builds skills to complement those taught in engineering and computing classrooms.

The SELF Fellows strengthen their abilities in leadership, entrepreneurship, business, communication, management, interpersonal skills, as well as engineering. Mr. Self would say these students have a “fire in the belly” and believed they are the future leaders in business and industry. Mrs. Self, an avid gardener, might conclude the Fellows are seeds of change for the world.

At KU we look toward the future with excitement because we know the SELF fellows have the tools needed to deliver positive change and innovation for the world.

Sincerely,

Michael Branicky, Sc.D., P.E.
Dean of Engineering
ABOUT THE PROGRAM

The Self Engineering Leadership Fellows Program was established in 2007 as the result of a contribution to the KU Endowment Association from Madison “Al” and Lila Self. The Selfs’ intention for the program is to identify and develop students who have a passion for engineering and possess a “fire in the belly” mentality.

In the fall of 2007, the program welcomed 15 freshmen Fellows. In fall 2012, Heidie Grove-Tosaka and Amanda Hornick joined the School of Engineering to help coordinate the SELF Program with Charles Neiss, who has been a SELF Coordinator since the summer of 2010. Currently, the SELF Program has four classes of undergraduate students, totalling 90 participants. The program graduated its first class of Fellows in the spring of 2011.

The program rewards its participants with a scholarship worth $24,000 dispersed over four years. A small number of students join the program at the end of their second year and are offered a $14,000 financial package for their final two years at the University of Kansas.
WHAT THE FELLOWS DO

The SELF Program’s Fellows participate in a wide range of activities and have established themselves as leaders across campus. The Program invites leaders of industry such as Brian McClendon, Vice President of Engineering for Google, and Sam Gilliland, retired CEO of Sabre Holdings Company, to put on seminars and lectures. In fall 2013, Mark Reuss, Executive Vice President and President, North America for General Motors, spoke about his journey within the business.

The Fellows have coordinated and helped with numerous events throughout campus. They run the Engineering High School Design Competition, volunteer with various organizations, and participate in the groundbreaking ceremonies for the Learned Engineering Expansion Phase 2 (LEEP2) as well as the grand opening for the Measurement, Materials, and Sustainable Environment Center (M2SEC). In 2008, the inaugural class of Fellows started Flapjacks for Philanthropy, an annual breakfast buffet of pancakes that continues to raise funds to donate to a selected charity or group in the community. The Fellows have also volunteered at Bike MS and The Great Santa Run. They have participated in over 100 student groups and helped bring innovative ideas to the University of Kansas and the School of Engineering.

LEADERSHIP DEVELOPMENT

SELF on the Road
This new initiative gives SELF Fellows the opportunity to form and strengthen connections with industry professionals beyond the Kansas City metro area. By visiting companies, students are exposed to the wide variety of options available to them after graduation and companies get to learn more about the great opportunities at KU. In its first year, the rising senior class of SELF Fellows visited Los Angeles and Silicon Valley and had the chance to interact with many alumni and friends of KU Engineering.

Fellows Retreat
Each year the sophomore and junior Fellows travel to Junction City, Kansas, for a weekend of leadership and fellow bonding. The sophomores venture through a ropes and obstacle course and learn valuable leadership skills while the juniors prepare to lead High School Design Competition.

SELF Speaker Series
The SELF Program selects and brings in noted speakers for the entire School of Engineering. Past speakers include: Mike Chesser, CEO of Kansas City Power and Light; Allyn Risley, President of LNGas; and Greg Graves, CEO of Burns and McDonnell.

COMMUNITY OUTREACH

High School Design Competition
Members of SELF worked around the clock to host the High School Design Competition, an annual event where high school students design and build projects to compete against one another. This past year’s competition hosted three separate challenges for participants and brought over 300 students to campus.

PHILANTHROPY

Flapjacks for Philanthropy
This annual spring fundraiser is coordinated by the sophomore Fellows and is always greatly anticipated. The flavorful fundraiser has raised over $15,000 for various charities in northeast Kansas.

Gingerbread Houses
Over the past five years, SELF Fellows have dedicated countless hours, hundreds of pounds of gingerbread, and a mountain of royal icing to the construction of edible works of art. These delicious architectural masterpieces are donated to the annual auction for the Big Brothers Big Sisters of Douglas County. Past creations have included Danforth Chapel, Allen Fieldhouse, Spooner Hall, the Campanile, Kauffman Stadium, and several of the NBA arenas where Jayhawk alumni have gone on to play professionally.
Seniors
<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>hometown, state</th>
<th>Involvement</th>
<th>Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathaniel Abeita</td>
<td>Civil Engineering</td>
<td>Hiawatha, KS</td>
<td>American Indian Science and Engineering Society, Chi Epsilon, Student Relays Committee</td>
<td>“I am trying to increase involvement of Native American students on campus by offering a better organization they can turn to.”</td>
</tr>
<tr>
<td>Austin Abitz</td>
<td>Aerospace Engineering</td>
<td>Prairie Village, KS</td>
<td>American Institute of Aeronautics and Astronautics, KU Engineering Student Council</td>
<td>“I organized a group of students to travel and meet with our Kansas Representatives in Washington, D.C., for the AIAA Congressional Visit Day and the future of the aerospace industry.”</td>
</tr>
<tr>
<td>Austin Cook</td>
<td>Petroleum Engineering</td>
<td>Lawrence, KS</td>
<td>Society of Petroleum Engineers, KU Engineering Ambassadors, Alpha Tau Omega Fraternity</td>
<td>“I traveled with a group of petroleum engineering students to Amsterdam, Netherlands to participate in the Society of Petroleum Engineers’ annual technical conference where I did some community outreach, supported the Petrobowl team, and made connections with several companies.”</td>
</tr>
<tr>
<td>Olivia Armstrong</td>
<td>Aerospace Engineering</td>
<td>Wilmette, IL</td>
<td>Project Lead the Way Advisory Board, St. Lawrence Social Justice Team, Engineering Ambassadors</td>
<td>“I am working on bridging the gap between aerospace industries and the students who are pursuing STEM fields through engagement at the KU School of Engineering, national STEM conferences, and aerospace industrial sites.”</td>
</tr>
<tr>
<td>Jackie Boino</td>
<td>Architectural Engineering</td>
<td>Dalton, MA</td>
<td>Society of Women Engineers, Architectural Engineering Institute, KU Running Club</td>
<td>“I will be participating in The Haiti Plunge, an organization which is trying to rebuild several communities in Haiti, sending several groups of young students eight times a year to assist.”</td>
</tr>
<tr>
<td>Ryan Endres</td>
<td>Aerospace Engineering</td>
<td>DeSoto, KS</td>
<td>Engineers Without Borders, KU Student Senate</td>
<td>“I am researching, designing, and prototyping a portable indoor tiered garden.”</td>
</tr>
<tr>
<td>Emily Cook</td>
<td>Civil Engineering</td>
<td>Olathe, KS</td>
<td>Unplug KU, Engineers Without Borders, KU Environ</td>
<td>“I founded the organization Unplug KU to implement and encourage energy savings projects on campus.”</td>
</tr>
</tbody>
</table>
Dalen Fink
Mechanical Engineering
O'Fallon, MO
Involvement
KU Track & Field, Alpha Tau Omega Fraternity, Pi Tau Sigma

Capstone
"My capstone project is focused on improving the mechanical engineering department’s physical resources in order to provide students with increased capabilities in terms of coursework, student organization projects, design work, and independent or personal projects."

Alexis Grimm
Mechanical Engineering
Parker, CO
Involvement
Society of Women Engineers, Biomedical Engineering Society, Pi Tau Sigma

Capstone
"I will be visiting manufacturing sites in China to make curriculum recommendations for design for manufacturability courses, and basic-level mechanical engineering courses."

Cory McCoy
Petroleum Engineering
Springfield, MO
Involvement
Society of Petroleum Engineers, Delta Tau Delta Fraternity

Capstone
"I traveled to Amsterdam for a Petroleum Engineering Conference where I connected with industry professionals from all over the world."

Brandon Huddleston
Engineering Physics
Harper, KS
Involvement
Institute of Electrical and Electronics Engineers, Academic, Access & Achievement Center

Capstone
"I am creating a promotional video to entice local middle school through high school students to become more excited and involved with STEM."

Drew Humphreys
Mechanical Engineering
Lenexa, KS
Involvement
Beta Theta Pi Fraternity
KU Energy Club, Pi Tau Sigma

Capstone
"I am attending the Renewable Energy Markets Conference in Sacramento to learn more about the details of how renewable energy projects are financed and brought from just an idea to an actual installation."

Sarah Moore
Chemical Engineering
Stilwell, KS
Involvement
Girl Scouts Leader, Premedical Engineers Club, E.R. Volunteer

Capstone
"I did a pharmaceutical engineering internship in Australia, presented to freshmen engineering classes about the logistics of interning abroad, and collected information about how to go to medical school abroad."

David Menagér
Computer Science
Topeka, KS
Involvement
St. Lawrence, Cognitive Control Research Lab, National Society of Black Engineers

Capstone
"In my capstone, I will create a document that details the design of a vertical farm prototype."

Peter Muehlebach
Chemical Engineering
Prairie Village, KS
Involvement
KU Men’s Club Lacrosse, KU Chess Club

Capstone
"I am working with the Dole Institute of Politics to organize this year’s Innovations Speaker Series."

Sarah McCoy
Chemical Engineering
Stilwell, KS
Involvement
Girl Scouts Leader, Premedical Engineers Club, E.R. Volunteer

Capstone
"I did a pharmaceutical engineering internship in Australia, presented to freshmen engineering classes about the logistics of interning abroad, and collected information about how to go to medical school abroad.”
Amanda Parks
Electrical Engineering
Kansas City, KS
Involvement
Engineering Student Council, Society of Women Engineers, Eta Kappa Nu
Capstone
“I am working with 4th-8th graders to help expose them to engineering and business at a young age while providing community service opportunities to students at the School of Engineering.”

Trevor Prater
Chemical Engineering
Derby, KS
Involvement
Genuine Imitation Acapella, KU Honors Program Student Council
Capstone
“I am organizing a seminar about the science and engineering behind brewing beer.”

Jessica Swenson
Chemical Engineering
Castle Pines, CO
Involvement
Society of Women Engineers, Jayhawk Motorsports
Capstone
“The focus of my capstone is to investigate how companies effectively implement projects and create cultures with a sustainability focus.”

Darrin Sorem
Mechanical Engineering
Lawrence, KS
Involvement
Jayhawk Motorsports, Architectural Engineering Institute, KU Men’s Club Volleyball
Capstone
“T’LL be representing the KU Formula SAE Racing Team at a worldwide trade show where companies display and market their innovative racing products.”

Scott Strycker
Electrical Engineering
Independence, KS
Involvement
Institute of Electrical and Electronics Engineers, KU Energy Club
Capstone
“T’went to the IEEE Rural Electric Power Conference to learn more about the challenges that engineers in that field face.”

Joe Weaver
Aerospace Engineering
Omaha, NE
Involvement
Sigma Gamma Tau, American Institute of Aeronautics and Astronautics, KU Engineering Student Council
Capstone
“My project involves researching the effects of winglets on small unmanned aerial systems and presenting this work at a technical conference.”

Sarah Taylor
Mechanical Engineering
Rolla, KS
Involvement
Jayhawk Motorsports, Lawrence Wesleyan Church, American Foundation for Suicide Prevention
Capstone
“I am attending the International Association of Amusement Parks and Attractions Expo in Orlando, Florida, and using connections made there to promote engineering opportunities in the entertainment industry to current KU students.”
Keaton Arnold
Civil Engineering
Topeka, KS
Involvement
KU Energy Club, KU Engineering Ambassadors, Ellis Mentoring Foundation

Gretchen Baker
Mechanical Engineering
Omaha, NE
Involvement
Biomedical Engineering Society, The Navigators, Alpha Delta Pi Sorority

Noah Benham
Computer Science
Lawrence, KS
Involvement
Engineers Without Borders, KU Engineering Ambassadors

Tiffany Fisher
Chemical Engineering
Moundridge, KS
Involvement
Engineers Without Borders, KU Biodiesel Initiative, Big Brothers and Big Sisters

Payton Fraley
Chemical Engineering
Latham, KS
Involvement
American Institute of Chemical Engineers, KU Engineering Student Council

David Gelvin
Mechanical Engineering
St. Petersburg, FL
Involvement
KU Energy Club, New Church Lawrence

Julia Dury
Civil Engineering
Blue Springs, MO
Involvement
American Society of Civil Engineers, KU Track & Cross Country, InterVarsity Christian Fellowship

Audrey Danser
Architectural Engineering
Edmond, OK
Involvement
Engineers Without Borders, Style on the Hill

Alek Eskilson
Computer Science
Berryton, KS
Involvement
Association for Computing Machinery, KU Engineering Student Council

Jordan Hildenbrand
Chemical Engineering
Blue Springs, MO
Involvement
KU Dance Marathon, KU Engineering Ambassadors, Undergraduate Research

Grant Isom
Computer Science
Lawrence, KS
Involvement
Association for Computing Machinery, Sigma Chi Fraternity, Competitive Programming

Hannah Kovarik
Mechanical Engineering
Olathe, KS
Involvement
Engineers Without Borders, Jayhawk Motorsports, Kappa Alpha Theta Sorority
Jeff Kraus
Computer Engineering
Lenexa, KS
Involvement
Engineers Without Borders, KU “Spryhawks” Waterski Team, Association of Computing Machinery

Aswathi Pradeep
Civil Engineering
Overland Park, KS
Involvement
KU South Asian Student Association, KU Jeeva-Fusion Dance Team

Jessica Krutty
Mechanical Engineering
Olathe, KS
Involvement
KU Women’s Club Soccer, KU Engineering Ambassadors

Brett Siegrist
Electrical Engineering
Lenexa, KS
Involvement
Beta Upsilon Chi Brothers Under Christ Fraternity, Institute of Electrical and Electronics Engineers, Velocity Church

Kelsey Ling
Chemical Engineering
Overland Park, KS
Involvement
Biomedical Engineering Society, Kappa Alpha Theta Sorority

Evan Nichols
Computer Science
Leawood, KS
Involvement
Beta Theta Pi Fraternity, KU Energy Club, Association for Computing Machinery

Theta Tau, KU Engineering Student Council, Engineers Without Borders

Alvaro Papa Silva
Mechanical Engineering
Caracas, Venezuela
Involvement
KU Engineering Student Council, Alpha Tau Omega Fraternity, Theta Tau

Jon Volkin
Chemical Engineering
Lawrence, KS
Involvement
Beta Theta Pi Fraternity, Project Discovery, Undergraduate Research

Megan Teahan
Computer Science
Overland Park, KS
Involvement
Theta Tau, KU Engineering Student Council, Engineers Without Borders

60% of SELF Fellows have had an engineering-focused internship before the start of their junior year.
25% of Fellows have received an undergraduate research award at KU or another institution.
Sophomores
Rachel Bender
Petroleum Engineering
Lincolnwood, IL
Involvement
Alpha Chi Omega Sorority, The Hunger Run, Greek Tutor

Robby Cowdrey
Computer Engineering
Overland Park, KS
Involvement
Institute of Electrical and Electronics Engineers, KU Energy Club, Sophomore Leadership Challenge

James Crowder
Mechanical Engineering
Overland Park, KS
Involvement
Beta Sigma Psi Fraternity, American Society of Mechanical Engineers, Relay for Life

Luke Deggendorf
Aerospace Engineering
Olathe, KS
Involvement
St. Lawrence Center, Students for the Exploration and Development of Space Rocketry Program

Hayley Disney
Mechanical Engineering
Topeka, KS
Involvement
Sigma Kappa Sorority, Midwest Affiliate of College and University Residence Halls

David Easley
Computer Engineering
Raytown, MO
Involvement
Institute of Electrical and Electronics Engineers, KUmana

Scott Edwards
Chemical Engineering
Leawood, KS
Involvement
Sigma Chi Fraternity, American Institute of Chemical Engineers

Eric Ferguson
Computer Engineering
Lenexa, KS
Involvement
Beta Sigma Psi Fraternity, Jayhawk Motorsports

Tomas Green
Chemical Engineering
Seattle, WA
Involvement
KU Engineering Student Council, Engineers Without Borders, TEDxKU

Hayley Disney
Mechanical Engineering
Topeka, KS
Involvement
Sigma Kappa Sorority, Midwest Affiliate of College and University Residence Halls

David Easley
Computer Engineering
Raytown, MO
Involvement
Institute of Electrical and Electronics Engineers, KUmana

Evan Halpern
Petroleum Engineering
Golden, CO
Involvement
Society of Petroleum Engineers, Center for Community Outreach, Pi Kappa Alpha Fraternity

Katherine Hickerson
Chemical Engineering
Overland Park, KS
Involvement
Kappa Alpha Theta Sorority, REbel Peer Education Program

Faith Johnson
Civil Engineering
Paola, KS
Involvement
American Society of Civil Engineers, KU Swing Society
82% of SELF Fellows have held a leadership role in a campus or community organization since arriving at KU.
39% are members of a fraternity or sorority.
Hannah Johnson
Computer Science
Lawrence, KS
Involvement
KU Engineering Student Council, Society of Women Engineers, Kappa Alpha Theta Sorority

Alita Joseph
Computer Science
Lawrence, KS
Involvement
Music Mentors, Lawrence Public Library Volunteer, SPARK KU

Mary Joyce
Chemical Engineering
Leawood, KS
Involvement
Gamma Phi Beta Sorority, KU Engineering Student Council, Society of Women Engineers

Lauren Sherwood
Aerospace Engineering
Topeka, KS
Involvement
Gamma Phi Beta Sorority, KU Engineering Student Council

Luc Robinett
Civil Engineering
Overland Park, KS
Involvement
KU Women’s Tennis Team, KU Chess Club

Lauren Pickens
Chemical Engineering
Owasso, OK
Involvement
KU Women’s Tennis Team, KU Chess Club

Micah Stiel
Chemical Engineering
Smith Center, KS
Involvement
KU Student Senate, Society for Biomaterials, KU Honors Ambassadors Program

Hannah Leiker
Chemical Engineering
Olathe, KS
Involvement
Theta Tau, American Institute of Chemical Engineers

Lauren Johnson
Computer Science
Columbia, MO
Involvement
Gamma Phi Beta Sorority, KU Engineering Student Council

Paul Vicente
Civil Engineering
Kohler, WI
Involvement
KU Club Baseball, Society of Hispanic Professional Engineers, American Society of Civil Engineers

10% of current SELF Fellows have participated in an NSF-sponsored Research Experience for Undergraduates.
Class of 2014
Ricky Bellinger
Ben Braun
David Catt
Qi Chen
Zach Garber
Mason Jenne
Mark Krusky
Jill Langlas
Alison Lusk
Chris Raider
Evan Reznicek
Nicole Risoky
Kathryn Scherrich
Ali Zaidi
RJ Zeiler

Class of 2013
Gabe Bliss
Jamie Branch
Hanna Congrove
Erik Deddens
Luke Ezell
Camille Fittell
Matthew Fowler
Chris Hudson
Hayden Maples
Ryan Poff
Gelareh Samandi
Austin Smith
Matthew Toft
Matthew Vestal
Hans Walther
Emma Watson
Matthew Werner

Class of 2012
Mary Adams
Emily Dellwig
Samantha Forbes
Megan Godsey
Nick Hoffinan
Lauren Lacey
Greg Longing
Sarah Elizabeth McCandless
Scott Mitchell
Sida Niu
Garrett Scarlett
Kara Walker
Matthew Williams
Eric Withaus
Chloe Wooldridge

Class of 2011
Kathleen Armstrong
Brian Blackwell
Colin Davidson
Carol Fittell
Jake Hamilton
Brian Larkin
Kelly Lehnerer
Markie McCorkley
Joseph Meyer
Steven Qiu
Brandie Rhades
Drew Robinson
Abby Rime
Kevin Shapley
Adam Vieux

STAFF

Heidie Grove-Tosaka
Program Director
ghanieh@ku.edu
785-864-2945
Directs, administers, and cultivates the overall vision and development of the SELF Program and assists staff in overall recruitment and retention goals of the School of Engineering.

Amanda Hornick
Senior Coordinator
ajhornick@ku.edu
785-864-6826
Oversees freshman and sophomore classes of SELF Fellows, coordinates the sophomore review process, and facilitates leadership development mentoring for Vann and KIPP Scholars.

Charles Neiss
Senior Coordinator
charles@ku.edu
785-864-7858
Oversees junior and senior classes of SELF Fellows, coordinates SELF on the Road and Senior Capstone projects, manages application process for incoming freshmen and juniors.
ABOUT THE BENEFACTORS

The SELF Program was made possible through a generous donation to the KU Endowment by Madison “Al” and Lila Self in 2007. Mr. Self was a native of Otraskie, Kansas, a 1943 KU chemical engineering graduate, a successful businessman and the recipient of the School of Engineering’s Distinguished Engineering Service Award in 2000. Mrs. Self was originally from Eudora, Kansas, and also a member of the KU Class of 1943.

Mr. Self served as the Chief Executive Officer and Owner of Bee Chemical Company, which became an international leader in polymer coatings during his tenure. When Bee Chemical Company was sold to Morton Thiokol, Inc., global sales totaled $110 million annually. After the sale of the company, Mr. Self founded Allen Financial, Inc. and was the president. He was a past international president of the Young Presidents’ Organization, had served as chairman of the Chief Executives Organization and was a founding member of the World Presidents’ Organization.

The Selfs, who met at KU, are the largest academic donors to the University of Kansas. Mr. and Mrs. Self also supported the Self Graduate Fellowship Program, which was established in 1989 and currently supports 28 doctoral students in a variety of fields. They resided in Hinsdale, Illinois, and both passed away in 2013.

CONTACT US

If you have questions about the SELF Program, please get in touch with us.
785-864-2945 | engrself@ku.edu | www.engr.ku.edu/self

For more information about the KU School of Engineering or the Self Engineering Leadership Fellows Program, please visit our website at www.engr.ku.edu. Application information for the SELF Program can be found at www.engr.ku.edu/self.

You can reach us in person or through the mail at:
1520 W. 15th Street
Eaton Hall, Room 1
Lawrence, KS 66045