

What Faculty, Staff and Administrators Can Each Bring to the Global E3 Table

Global E3 Annual Conference

Hong Kong, April 4-6, 2018

## Session Overview

OEver wondered -



"How can I support my school's membership in Global E3?"

"When it comes to Global E3, what exactly am I supposed to be doing?"

## Session Overview

- OPresentations by
  - OGlobal Education Staff & Administrators
  - **O**Faculty
  - OAcademic Administrators
  - on the unique roles each can play in supporting Global E3 at your school.

OResult? Ideas for specific things you can do.



Presentation	Presenter				
Global Education Admin/Staff	Dani Ascarelli, Vice Provost International Programs & Director of Study Abroad Drexel University				
Global Education Admin/Staff	Natalie Downing, Assoc Director Faculty Services University of Newcastle				
Faculty	Jerry McCoy, Appl Assoc Professor Physics & Engineering Physics The University of Tulsa				
Faculty	Aldert Kamp, Director of Education Aerospace Engineering TU Delft				
Faculty	Greg Tonkay, Assoc Professor & Assoc Dean for Academic Affairs Industrial & Systems Engineering Lehigh University				
Academic Admin	Per Warfvinge, Asst Dean Faculty of Engineering Lund University				
Academic Admin	Randy Collins, Exec Director Academic Initiatives Clemson University				
Audience Contribution	AUDIENCE				

## Dani Ascarelli

- Associate Vice Provost, International Programs
- Director, Study Abroad
  - Centralized Study Abroad and International Office
  - Member of GE3 for 15+ years
  - Quarter School
  - Intl Co-op managed by Steinbright Career Development Center



# How to be an A student...

- **O**Admissions
- **O**Advisors
- **O**Ambassadors



# Admissions



- OAre you part of your admissions offices materials?
- OAre you at yield events?
- OAre you part of welcome week?



# Advisors

ODo they know which GE3 school works best for their students?



**AND SEE YOUR** 

ACADEMIC ADVISOR

OHave you curated the options?

ODo you have study plans with curriculum integration?

# Ambassadors, virtual and IRL

O Are you using social media?



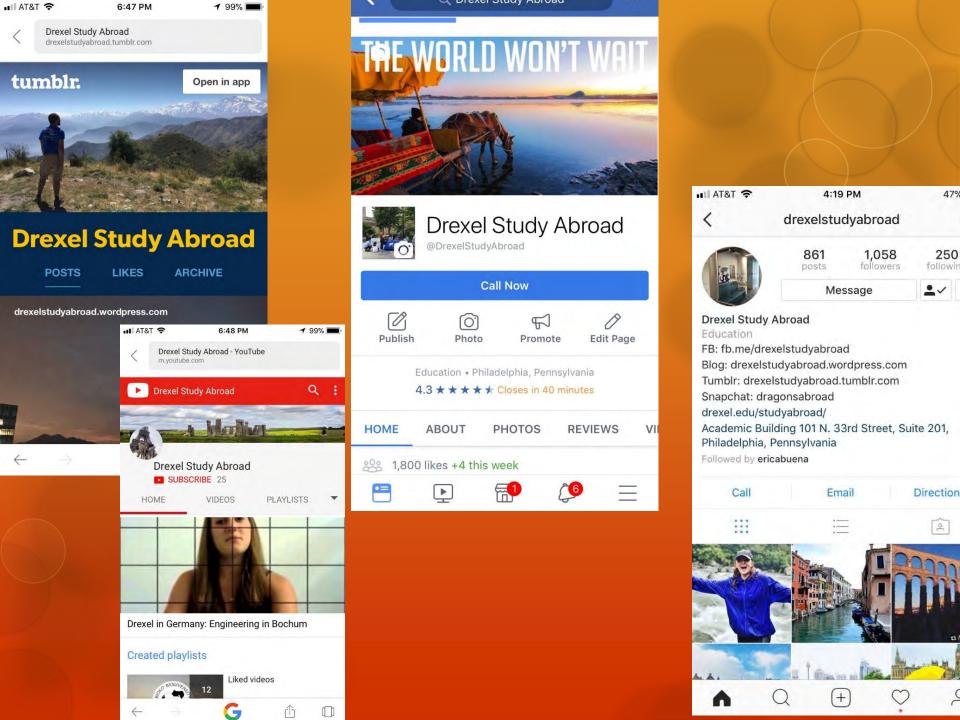








- O Do you have student blogs?
  - Ohttps://studyabroadblog.drexel.edu/
- ODo you have an ambassador program? (tip, have them control your social media)







# What Faculty, Staff and Administrators can each bring to the Global E3 table

# NATALIE DOWNING Associate Director

Faculty of Engineering and Built Environment University of Newcastle (UON), Australia



# GLOBAL E3 AT UON SNAPSHOT SO FAR

16

UON students participated in Ge3 26

Ge3 students visited UON 12 +

scholarships awarded to UON Ge3 students 10

Ge3 partners visited by UON students 12

partners have sent students to UON



# THE UNIVERSITY OF NEWCASTLE AUSTRALIA

#### General management and liaison

- O Connecting GE3, Faculty and the international office
- O Relationship interface
- O Coordinating UON involvement with meetings and events

#### Leveraging the association

- O General promotion and brand association
- O Website
- O Brochures
- O Powerpoint slides

#### Facilitating extended partnerships

- O Visiting and liaising with partners
- O Developing MOUs
- O Drafting communications for Faculty executive





Optimising student participation in GE3 exchange

- O Special events featuring presentations from returning students
- O Information delivery
- Promotion including video interviews & blogs from returning Ge3 students
- Faculty of Engineering and Built Environment Global E3 Exchange Scholarship
- O Creation of customised study plans to help students plan for a semester abroad

Communicating GE3 student opportunities

- O Social media
- O Blackboard (Learning Management System)
- O Email
- O Digital signage

# PROMOTION TO FUTURE STUDENTS

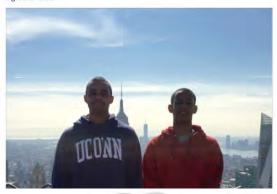




#### University of Newcastle - UON Future Students December 12, 2016 ⋅ ⊚

Itching for an international experience? Check out UON student Joel's adventure: http://bit.ly/JoelsOverseasExperience. The Global E³, is an international partnership agreement that allows engineering students to study abroad at distinguished universities and UON is one of only two Australian partners in the international program! Through this program that Joel, Bachelor of Engineering (Honours) Chemical / Business student, received the opportunity to study at the University of Connecticut!

Interested in engineering? http://bit.ly/EngineeringatUON #studyUON #greatchoice





#### University of Newcastle - UON Future Students November 16, 2017 · @

Congratulations to UON Electrical Engineering student Sam Parker, who has just been awarded a 2018 internship at NASA

Sam was studying in Pittsburgh in the US as part of the Global Engineering Education Exchange (Ge3) – specialising in reading and decoding brain signals to try and help people with a disability to move their limbs again.

At NASA, the 20-year-old is expected to be decoding new experimental aircraft.

Find out where a degree in engineering from UON could take you! https://www.newcastle.edu.au/study/engineering



#### Newcastle student lands NASA internship

Newcastle student lands NASA internship after dreaming of being an astronaut.



Ready for your career, ready for the world: our professional practice and leadership courses will help you develop skills in legal issues, finance, project management, social responsibility, sustainability, communications, innovation and entrepreneurship. UON is one of only 3 Australian members of the prestigious Global Engineering Education Exchange 'GE3' network, you can study and gain credit towards your degree at any of 72 international partners such as University of Michigan (USA), Nanyang University of Technology (Singapore), University of Sheffield (UK) and Xiamen University (China).

business through industry-based projects, guest lectures, mentorship and case studies. Our graduates secure jobs with international firms such as Hatch Associates, Parsons Brinckerhoff, Boeing, Bohemia Interactive, Schneider Electric, Jacobs Engineering, ALS Global, Joy Global and Delta Energy Systems.

TOP 100 Civil Engineering UNIVERSITIES IN THE WORLD

#### Recognised by industry and globally:

take your career anywhere in the world with international recognition through Engineers Australia and the Washington Accord.

# WHY NEW?

We offer one of the leading engineering qualifications in the country. Not only do our unique degrees prepare you for the jobs of the future, our combination of world-class teaching, international partnerships and opportunities to find your new before you even graduate, means you'll be a step ahead from the beginning.

#### **NEW BREAKTHROUGHS**

Some of our leading researchers at UON are discovering world-first breakthroughs. Professor Graham Goodwin is developing an 'artificial pancreas' program to improve the lives of people living with diabetes. Professor Serbada Moghtaderi is developing ultra-efficient biomass energy solutions for developing countries. And Dr Shamus Smith is finding ways to use virtual reality gaming technology to train surgeons. Engineering students get paid opportunities to be part of exclung new research like this.

#### START-UP SUPPORT

As an engineering student at UON, you'll be inspired to bring your own 'new' into the world. Graduate, Andreas Antoniades' start-up company, Obelisk Systems, manotactures affordable satellites for STEM education. Kenny Hong is developing sophisticated software to facilitate remote access to radiology records. And Anthony Laskovsik has recently founded a successful Silicon Valley company, VIMOC.

#### RANKED NUMBER 1

Our engineering degrees are one of the most prestigious and awarded in the country. At UDN, our engineering programs are ranked number 1 in NSW for overall quality, good leaching, student satisfaction and graduate salaries. Our position as one of the most highly ranked engineering faculties in Australia is recognised through our associate membersing of the Group of Eight.

#### **GLOBAL AND LOCAL**

UON engineering degrees are professionally accredited by Engineers Australia and the Washington Accord. This means you can use your qualifications to work anywhere in Australia but also across the world in locations such as Canada, Hong Kong, India, Ireland, Japan, Korea, the UK and USA. Plus, UON is unique as it is one of only three Australian members of the Global Ef Network, giving you the chance to go on exchange to the world's most prestigious engineering schools including the University of Michigan and TU Delft.

THE GLOBAL E<sup>3</sup> NETWORK
70+ PRESTIGIOUS
ENGINEERING FACULTIES
IN 24 COUNTRIES







Our position as one of the most highly ranked engineering faculties in Australia is recognised through our associate membership of the Group of Eight.

# PROMOTION TO CURRENT STUDENTS





**UON Engineering** 

Published by KT Brandstater [?] - August 11, 2016 - @

UON is one of only three Australian member institutions of the Ge3 Program. The Ge3 is an International partnership agreement that enables UON's engineering students to venture abroad to a multitude of distinguished universities around the world.

Top reasons to take part in the Ge3:

- \* No tuition fees is included in HECS/HELP
- \* Earn credit towards your degree & graduate on time
- \* gain foreign language skills, cross-cultural expertise and professional
- \* set yourself apart in the job market

Here Electrical Engineering student Ben Chen shares his experience of studying at one of our Global Engineering Education Exchange (Ge3) partner institutions, Nanyang Technological University in Singapore.



**Get More Likes, Comments and Shares** 

Boost this post for \$26 to reach up to 6.600 people.

1 7,231 people reached

**Boost Post** 



**UON Engineering ③** January 14, 2015 · @

Where could you go in 2015? Applications for Semester 2 international exchange close on January 31.

Last year we had engineering students studying in Canada, the UK, USA, Germany, and Sweden...

There are lots of scholarships available to support students whilst studying overseas:http://www.newcastle.edu.au/.../study-o.../exchangescholarships

Exchange Scholarships / Study overseas / Study abroad and exchange / Study with us /...

\$5000 exchange scholarships for Australian students to go on a semester exchange in 2015.



**UON Engineering ③** 

July 28, 2015 - @

What is the Global E3?

Global E3 is an International partnership agreement that lets UON engineering students travel abroad to a multitude of distinguished universities in Asia, Europe, Latin America, the Middle East, and the United States.

We invite you to learn more about the Global E3 and find out how to apply at a short info session next week.

When: Tuesday 4th August

Time: 2.30pm

Where: FF122

Following the info session will be an afternoon tea where you can meet some of our students who have returned from an overseas exchange and ask them about their experience.

Spots are limited! Please register for catering purposes http://ge3infosession.eventzilla.net/



Study Overseas Info Session

5

Public - Hosted by University of Newcastle Architecture and 3 others

LICONN

BUILT TO DELIVER ABETTER WORLD

#### Details

Does the idea of studying abroad excite you? Not sure where to start?

There are so many options available to study overseas without delaying your graduation, and this experience really stands out on your CV! There's even a way to do your industrial experience overseas.

We are hosting an event in week 2 where you'll be able to find out the need-to-know facts about studying abroad.

Come along to enjoy some afternoon tea and pick the brain of some UON students who have been on an exchange experience.

Just let us know you're coming so we order enough croissants (s'il vous plait?) here http://febeglobalexchange.eventzilla.net/







## CUSTOMI SED PROGRAM PLANS

### YOUR STUDY ABROAD GUIDE





#### **BACHELOR OF ELECTRICAL AND ELECTRONIC ENGINEERING (HONOURS)**

			SI	TANDARD PROGR	RAM PLAN			
YEAR	SEMESTER 1				SEMESTER 2			
1	ENGG1500	ENGG1003	MATH1110	PHYS1210	ELEC1310	ELEC1710	MATH1120	PHYS1220
2	ENGG2500	ELEC2320	MATH2310	ELEC3730	ENGG2440	ELEC2430	ELEC2132	STAT2110
3	ENGG3500	ENGG3440	ELEC3240	ELEC3130	ELEC3850	DIRECTED	ELECTIVE	ELECTIVE
4	ELEC4840A	ELEC3540	DIRECTED	ELECTIVE	ELEC4840B	ELEC4840B	ENGG4500	ELECTIVE
			OPTION 1: ST	UDY ABROAD IN	<b>YEAR 2 SEMEST</b>	ER 2		
YEAR	SEMESTER 1				SEMESTER 2			
1	ENGG1500	ENGG1003	MATH1110	PHYS1210	ELEC1310	ELEC1710	MATH1120	PHYS1220
2	ENGG2500	ELEC2320	MATH2310	ELEC3730	STUDY ABROAD (3 X ELECTIVE + 1 X LIST A)			
3	ENGG3500	ELEC3240	DIRECTED	DIRECTED		3 X LIST A		ELEC3850
4	ELEC4840A	ENGG3440	ELEC3130	ELEC3540	ELEC4840B	ELEC4840B	ENGG4500	ELECTIVE
			OPTION 2: ST	<b>UDY ABROAD IN</b>	<b>YEAR 2 SEMEST</b>	ER 2		
YEAR	SEMESTER 1				SEMESTER 2			
1	ENGG1500	ENGG1003	MATH1110	PHYS1210	ELEC1310	ELEC1710	MATH1120	PHYS1220
2	ENGG2500	ELEC2320	MATH2310	ELEC3730	STUDY ABROAD (4 X ELECTIVE)			
3	ENGG3500	ELEC3240	DIRECTED		ENGG2440	ELEC2430	ELEC2132	STAT2110
4	ENGG3440	ELEC3130	ELEC3540		ELEC4840A	ELEC3850	DIRECTED	
5	ELEC4840B	ELEC4840B	ENGG4500					
			OPTION 3: ST	<b>UDY ABROAD IN</b>	<b>YEAR 4 SEMEST</b>	ER 2		
YEAR	SEMESTER 1				SEMESTER 2			
1	ENGG1500	ENGG1003	MATH1110	PHYS1210	ELEC1310	ELEC1710	MATH1120	PHYS1220
2	ENGG2500	ELEC2320	MATH2310	ELEC3730	ENGG2440	ELEC2430	ELEC2132	STAT2110
3	ENGG3500	ENGG3440	ELEC3240	ELEC3130	ELEC3850	ELEC4840A	ENGG4500	DIRECTED
4	ELEC4840B	ELEC4840B	ELEC3540	DIRECTED		STUDY ABROAD	(3 X ELECTIVE)	
5	ELECTIVE							

#### PROGRAM CODE | 40066

For students studying at Callaghan

Please note this is a guide only. It has been created based on the 2018 calendar and is subject to change by the Faculty of Engineering and Built Environment. For further advice on studying abroad, contact the study abroad team and/or your program advisor.

LIST A ENGG2440 ELEC2430 ELEC2132 STAT2110

# WHAT OUR STUDENTS SAY



Ben Chen, Electrical Engineering student Nanyang Technological University, Singapore

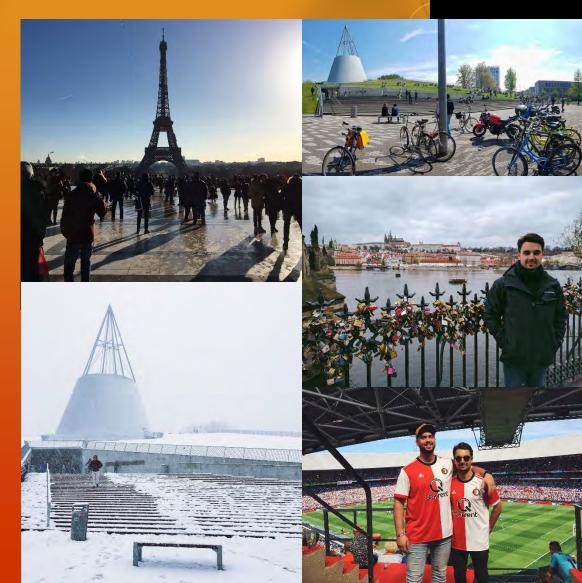


# WHAT OUR STUDENTS SAY



Brady Carr, Mechanical Engineering student Delft University of Technology, Netherlands

"During my studies at TU Delft, I was exposed to a completely new level of cutting edge research from an engineering perspective, inspiring me to hopefully reach a similar level during my career as an engineer."



# WHAT OUR STUDENTS SAY

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Kitab Shah, Electrical Engineering student Technical University of Denmark





## Aldert Kamp

Director of Education

Aerospace Engineering

Delft University of Technology





Global E3 Academic Liaison for TU Delft since 2013





# Why participate in Global E3?

OTU Delft aims to broaden a durable student mobility with US and Canada

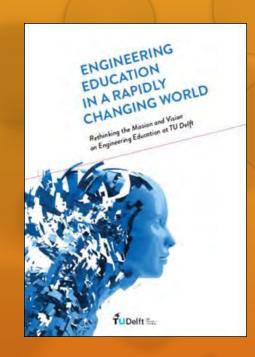
### O Global E3 consortium

- O robust, effective and efficient (one MoU)
- O most prominent network in STEM discipline
- O 40 US engineering and hi-tech institutes
- O 70 universities worldwide
- excellent platform for recognition by US institutions



# Why me?

- Rethinking engineering education
- O Active at faculty, university, national (4TU.CEE) and international (CDIO, CESAER, AGUPP) level



## O Aerospace Engineering

- O global playing field: the world is our market
- O graduate and undergraduate English taught
- O 40-50% foreign students
- O Students have high interest in study abroad





# My goals and tasks

### O Goals

- O Broaden US and Canada student mobility
- O Disseminate and learn from best practices in exchange, internationalisation, intercultural education

### O Tasks

- O Profiling of TU Delft in US engineering domain
- O Relationship management with preferred partners
- O Breaking down study-abroad barriers



# My way of doing things

- 1. TU Delft study culture
  - O Ambition, taking full advantage of opportunities
  - O Hands-on mentality, attitude of getting things done





2. Help building the Global E3 communityO A community is no more than its members

EXPOSURE = VISIBILITY



PROACTIVE ATTITUDE



## Activities within Global E3

- O New York 2013
  - O presentation "Educating Tomorrow's Engineers"
- O Singapore 2014
  - O workshop "Breaking down study-abroad barriers"
- O Michigan 2015
  - O announcement Annual Meeting 2016 in Delft
- O <u>Delft 2016</u>
  - O host of Annual Meeting "Connecting Engineers to Society"
- O <u>Lehigh 2017</u>
  - O workshop "Global change in engineering education" with contributions from nine universities + two blog-posts
- O Hong Kong 2018
  - O contribution to session "What faculty, staff and administrators can each bring to the Global E3 table"
  - O contribution to workshop "Engaged education: Developing the next generation of globally competent engineers"



# Activities at my university

- O For university
  - O Policy maker
  - O Bilateral agreements with preferred partners from Global E3 network
  - O (Assurance of) relationship management
- O For outgoing students:
  - O Minor-abroad framework
  - O Predefined Minors-abroad concept
- O For incoming students:
  - O Course overviews taught in English
  - O Linking pin to administrator





# Achievements and spin-offs

- O Recognition of TU Delft by US institutions
- O About 40% of TU Delft students who go to US on exchange go to Global E3 partner universities (incl. recent bilateral agreements)
- O In less than three years TU Delft has developed in a top preferred destination for exchange of US students
- O Good exposure of TU Delft for MSc applicants
  - O Significant increase of US students influx in Bachelor and Master degree programmes since Global E3 membership



# My to-do list at TU Delft

- O Removing barriers for study-abroad
  - O Academic calendar
  - O Proctoring of exams
- O Initiating bilateral agreements with new preferred partners
- O Exploring opportunities to combine exchange with research collaboration
- O Exploring opportunities to collaborate in education innovations





## Conclusions

- O Value of Global E3 consortium is created by the individual members
- O Exposure of your university requires you to be visible and proactive
- O You need more than a good administrator alone to create spin-offs of Global E3 beyond student exchange



# Jerry McCoy

Applied Associate Professor Physics & Engineering Physics The University of Tulsa

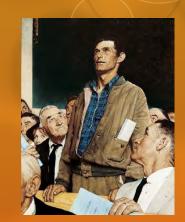




Global E3 Representative for TU College of Engineering & Natural Sciences since 2010.

## Things I Have Done ... With CGE

O Invited CGE staff to speak to my classes promoting study abroad in general and Global E3 in particular;



- O Brainstormed strategies for increasing studyabroad through Global E3
  - O Strategy 1: Encourage engineering faculty to promote study abroad with their students (faculty have students' attention);
  - O Strategy 2: Encourage engineering Dean to promote study abroad with department chairs (Deans have chairs' attention);
  - O Strategy 3: Integrate study abroad into curricula



- O Hosted visits by faculty/staff from Global E3 partners
  - O Mines Albi (southern France)
    - O TU Chem E faculty member took students for short course
    - O TU ME Chair teaches short courses
  - O Hangyang University: Former Eng Dean Sung Ho Chowill visit TU 4/16 to give technical talk, meet faculty



- O Submitted proposals to host annual Global E3 conference at TU
- O Staffed table representing Global E3 at study-abroad fair;





# Things I Have Done ... All By Myself!

- O Promoted study abroad in my classes
  - O "A study-abroad experience is an important component of any top-shelf engineering education."
  - O "Your default should be to study abroad; you should have a compelling reason *not* to study abroad."
- O Write recommendation letters for students to study abroad;
- O Advise students (not just your majors) regarding study abroad; encourage them to consider Global E3;
- O Pitched importance of study abroad to Dean
  - O Encouraged Dean to attend Global E3 conference



I WANT **YOU**TO STUDY ABROAD





# Things I Would Like to Do ...



- O Carry out joint distance-learning projects with Global E3 partners
  - O Develop into short exchange trips
- O Build study abroad into the curriculum

include.



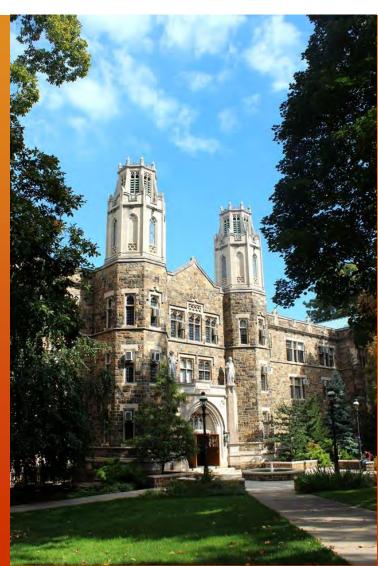
## Greg Tonkay



Associate Professor Industrial and System Engineering

Associate Dean for Academic Affairs

Global E3 Representative for P.C. Rossin College of Engineering and Applied Science since 2011



# I Wear Multiple Hats Faculty Admin? 10 min?

## General Role of Faculty in GE3

- O Learn about GE3 member schools
  - OPrograms offered and matches to home curricula
- O Learn about your own program
- O Keep track of students that have used GE3
- O Assist in course transfer approval
- O Be available to answer questions from other universities
- O Be a resource for international office
- O Point students in the right direction

## Things I have tried

- OAttend GE3 conferences
- OStudy Abroad Fairs



O Work with my department and University for course transfer approval



#### Lessons Learned

- Students like first hand experience
- Other students are the best salespeople OTry to establish a pipeline
- O Students initially excited about idea of study abroad, but must follow up
- O Some Departments/Faculty are stubborn ... Try to win over younger faculty
- O Use companies to provide positive input
- **O** \$\$\$ Help
- O Change takes time ... Don't despair

## New Things to Try

- OExperiential Learning Focus
- OMentoring System
  - OStudents bring students
- OPromote study abroad to first generation students
- OStay in contact with international office

### Lund - Our situation 2018/2019

## $\bigcirc$ 335 nominated (cohort $\approx$ 1000)

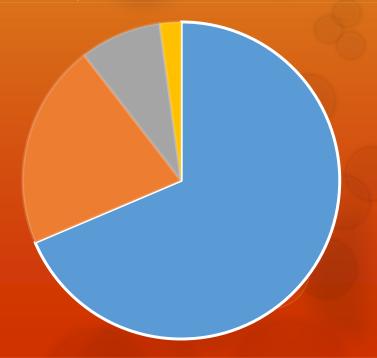
O7 to GE3

O27 on bilaterals to US GE3 partners

O68 on bilaterals to global GE3 partners

O223 on others

O 1/3 to GE3 partners!



## Efforts to promote G3

- OStrategic long term
  - O Mobility windows program structure
  - O Learning outcome based curricula
  - O Financing
- O Promotion Short term
  - OSteady inflow of GE3 students accept some unbalance
  - OInformation sessions general and program specific
  - O Expose partner facts sheets and web sites

#### What does it take?

- OStrategic long term
  - OListen to the students
  - OMake Academic Admins part of the management team on school/faculty/institutional level
  - O Negociate a common agenda
- O Promotion Short term
  - OListen to the students
  - Olnvolve the program level
  - ODo not decentralize too much



#### What will we do?

- O Tell more success stories
- Olnvolve the program directors (even) more
- O Be an attractive and reliable partner

O Introduce international and intercultural learning outcomes in program objectives

O Embrace a new National Strategic Agenda for Internationalization in Higher Ed and Research (new laws and regulations)

## Randy Collins

Professor of Electrical and Computer Engineering

Associate VP and Exec. Director of Academic Initiatives

Clemson University



Member of Global E3 Executive Committee

## My talks if from four vantage points:

- OAs a faculty member
- OAs an administrator
- OAs a member of the Executive Committee
- O As one who shares an office suite with Clemson's engineering study abroad Program Manager/Advisor.

## Global E3 membership

- O Demonstrates commitment by the institution to international engineering education.
- O At least one point person at each institution with a responsibility to liaise with Global E3.
- O Commitment to:
  - O Participate in the Global E3 activities
  - O Send and receive students through the consortium
  - O Make relevant courses available to students.

## Access to over 70 highlyregarding schools worldwide

- O Huge selling point to students
- OAdvantage to institution: Don't need a huge number of bilaterals to access the schools in the network.
- O You have a network of like-minded colleagues readily available and ready to help.

#### Institutions are well-vetted

- OImproves course evaluation for transfer.
- O Lessens the burden for ABET reviews.
- OStudents are taken care of:
  - OHealth and safety
  - **O**Housing
  - OTransition to life in the host country/university

## Taking advantage of this meeting

- O Global E3 sets itself apart as a "niche" organization focused on the specific needs of colleges of engineering who seek to a global education for their students.
- O Colleagues that are engaging and like-minded.
- O Any problems you encounter are likely also encountered by others.
- O Colleagues here quickly become great friends and are ready to help and explore new ways to collaborate.
- O Seek Global E3 colleagues at other meetings and also when traveling near their institutions.
- O Get to know the IIE staff. They are a wealth of knowledge and also provide access to many other things the IIE offers.

## Getting the word out to students

- O Global E3 info session versus imbedding in a broader info session
  - O How do you promote Global E3 separately, or do you?
- O Alerting/recruiting students early and often, from the very first year, about the options.
  - OStart during new student orientation and recruiting.
- O Institution website specifically devoted to Global E3
- O Letting faculty know about Global E3 it isn't just a third party provider.
  - O Make presentations at faculty meetings, department chair meetings, etc.

#### What can we do better?

- O Expand the consortium offerings to enable easier summer and "innovative" programs.
  - O Explore ways to work with different summer funding models at various institutions.
- O Institution-based websites specifically devoted to Global E3
- O Improve course offering information to make it easier for students to see what is available, which term, and in what language.
- O Improve the availability of course information needed for transfer evaluation.
  - O Master list was attempted. Difficult to maintain. Colleagues can help.
- O Create a Global E3 "fellow-like" program.
  - O Global E3 can be a special program and use to raise the profile of the Global E3
  - O Global E3 "class" social media page; branded merchandise.

#### What can we do better?

- O Pre-prepared presentations that you can use for promoting the Global E3 at your institution to faculty, students, and staff.
  - OCould host webinars for target audiences to promote the program.
- O Feedback from you: At the annual meeting, through the EC members, through the IIE/Global E3 staff representatives.
- O How will you take the things you've learned at the Annual Meeting this year and apply them at your institution? What did you do after last year's meeting at Lehigh? The year before at TU Delft?