

International Engineering Program

College of Engineering and Computer Science
University of Central Florida



Current Global Situation

- The world continues to become smaller
 - Influenced by a Global Digital Transformation
- Multinationals are now truly multinational!
- International collaborations increasingly common
- Mergers and acquisitions becoming more common
 - Siemens and Westinghouse
 - Chrysler and Fiat
 - Leidos and LM/IS&GS
 - NG and Orbital ATK
- Essential for US engineers and scientists to globalize
 - Global Leadership Culture
 - Driving Global Solutions





Why Study Abroad?

- Personal Growth
 - Understand and appreciate diverse cultures
 - Expand circle of friends worldwide
 - Gain self reliance
 - Undertake new challenges
- Academic Enrichment
 - Fulfilling academic requirements
 - International perspective to your academic major
 - Increasing awareness of global issues
- Career Development
 - Makes you highly marketable
 - Enhances your resume
 - Provides you with professional contacts overseas
 - Exposes you to new career options
 - Shows a willingness to take initiative despite risk



International Engineering Forum



Impact of an International Education on your career success

Come share an afternoon with our guest speakers who will discuss how their companies value a globalized technical workforce.

Guest Speakers

Guillermo Novo - Chief Executive Officer and President of Versum Materials, Inc. (unconfirmed)



Rafael Mercado Ugarte, Chief of Staff to the General Manager– Business Consulting at IBM

Panel Discussion – Q&A with speakers, IEP alumni and students returning from a study abroad experience



**Wednesday September 5, 2018;
2:00 to 5:00 PM**

HEC 101

A reception will follow the Forum



Eligibility

- UCF undergraduate in any Engineering major, Computer Science or Information Technology
- 2.75 UCF GPA or strong recommendation from UCF faculty
 - Some programs require a higher GPA
- Junior or senior standing with at least one semester left before graduation
- The best time to go abroad is just prior to enrolling in Senior Design
 - Take Sr. Design on first semester after return





International Engineering Minor

- Excellent vehicle to gain international perspective
- Completion of minor goes on transcript

Total of 18-20 hours

1. Six to eight credits of a foreign language, preferably at UCF (but possibly overseas)
2. Three credits of cultural coursework at overseas partner institution
3. An experience abroad consisting of either:
 - Nine credits of engineering/technical coursework or
 - Nine credits of internship overseas



Go to: www.cecs.ucf.edu/minors/internationalengineering/



What If I Don't Want To Go Abroad?

- The IE minor requires an experience abroad
 - No exceptions!
 - It is the central focus of program!
- Can be for:
 - 1 semester (minimum)
 - 2 semesters
 - Unfortunately, summer is not enough
- Credits earned overseas will typically apply to your degree (although not guaranteed)
- Financial aid is available
 - On a competitive basis, however





Language Proficiency Policy

- Understanding a country's language is key to learning their culture
- Therefore, we encourage participants to learn a new language and possibly take coursework in it.
- However ... for programs taught in a foreign language:
 - Students must show advanced proficiency in the language either through lang. instructor consent or by taking the Foreign Language Proficiency Exam
 - Students not demonstrating advanced proficiency must spend 1 academic year abroad
 - First semester devoted to language study
 - Second semester for degree-related coursework





Foreign Language Training

What if I already speak the language of the country, ... or the country is Anglophone?

- Well, no need to do useless things!
- Instead of the language credits, the student will take two restricted cultural courses at UCF.
- Long list of possible courses to take.
 - See catalog link for IE Minor
 - See International Engineering advisor



What if the country is not Anglophone but they teach courses in English?

- You will still need to take language training (6-8 credits) if such courses are available at UCF, but proficiency need not be high



Study Locations

Many institutions and countries are available





Europe

- **Sweden:** Jonkoping University; Malardalen University
- **Spain:** University of Cantabria; University of Jaen
- **Switzerland:** Zurich Institute of Applied Science
- **Ireland:** Dublin Institute of Technology
- **U.K.:** University of Surrey
- **Germany:** Technische Universität Ilmenau; Fachhochschule Erfurt; Westfälische Hochschule, Hochschule Bremen





Asia and Pacific

- **China:** Hong Kong Polytechnic Institute
- **Australia:** RMIT University, Melbourne;
Griffith University, Gold Coast
- **Japan:** Saitama University
- **Vietnam:** RMIT (possible future site)
- **Thailand:** Jonkoping (possible future site).



Central and South America / Africa



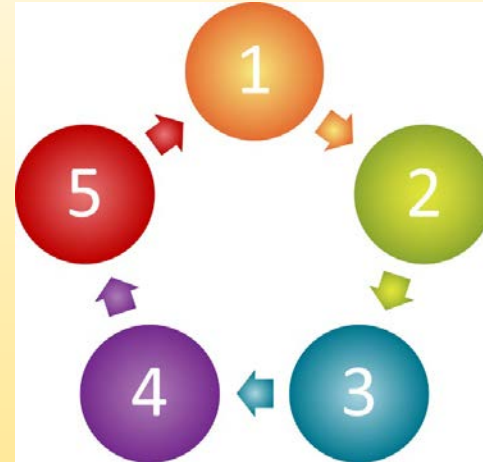
- **Brazil:** Pontificia Universidad Catolica de Rio Grande do Sul (PUCRS), Porto Alegre
- **Egypt:** American University of Cairo
- Future programs in progress of setting up (e.g., Costa Rica)



OK, I'm Sold! So, How do I Do it?

Making the arrangements for studying abroad is a five step procedure:

1. Academic arrangements
2. Administrative arrangements and Logistics
3. Cost, Finances, Scholarships, Resources
4. Experience abroad itself
5. Post-return activities





Step 1: Academic Arrangements:

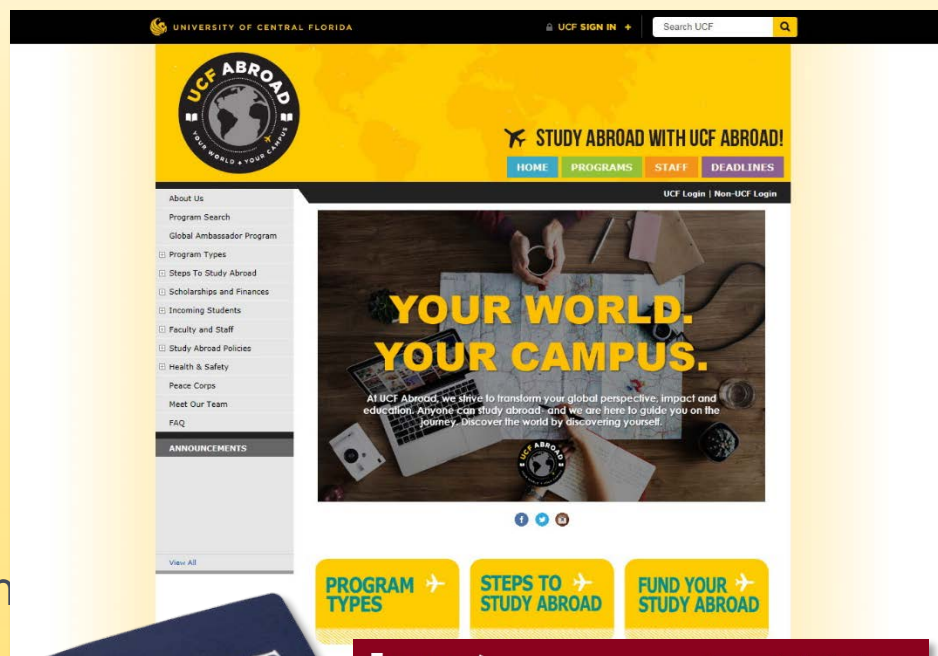
1. Complete the study abroad interest form:
<http://www.cecs.ucf.edu/study-abroad>
2. Review course equivalencies:
<https://www.cecs.ucf.edu/minors/internationalengineering/courses/>
3. Make an appointment for advising with Maureen Waked
mwaked@ucf.edu in CECS, 407 823-2455, ENG 1, room 107 in order to:
 - Review your academic audit
 - Select best university for you
 - Create course plan
 - Discuss process
 - Remain in contact with you during your time abroad





Step 2: Administrative Arrangements

- Visit studyabroad website: www.studyabroad.ucf.edu
 - Steps to Study Abroad
 - Study Abroad Policies
 - Search engineering programs
 - Review budgets
- Complete the UCF study abroad application and pay fee
- Apply to overseas partner institution
- Learn about country of destination
- Apply for passport and visa
- Make living arrangements
- Buy airline ticket



Step 3: Financing your Study Abroad

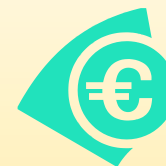
- Figuring out your finances and ensuring that you will be able to afford to study abroad is a very important part of the process
 - No fun running out of money while abroad
- But ..., not being able to afford it is a really bad excuse for not going.
- There are many sources of financial support for the qualified student who seeks it out - both internally at UCF and externally
- But first let's talk about how much \$\$\$ you will need.



How much \$\$\$ will I need?

- Cost of tuition is **the same** – you pay it at UCF only!
- Cost of apartment is **roughly the same** as at UCF
- Cost of food is **roughly the same** as in Orlando
- Local transportation generally **cheaper**: no car
- Air fare: \$500 to \$1,800, depending on location
- Visa, passport, fees, etc.: \$400-\$600
- Entertainment: can be high (\$2K to \$3K)
- All inclusive study abroad cost range from \$9,500 to \$16,000, depending on where you go
- As comparison, Cost of attendance at UCF for one semester = approx. \$10,000
- Visit studyabroad.ucf.edu search engineering programs. Then click on “budgets sheets”

What may seem like a big investment now can yield significant longer-term return!





Financial Aid, Scholarships

- **First**, be realistic. Select a program consistent with your financial ability!
- **Second**, note that any and all of your existing UCF scholarships, grants and financial aid (e.g., Bright Futures,) can be used as if you were at UCF.
- **Third**, seek out sources of financial aid:
 1. UCF aid programs
 2. Third-party aid programs
 3. Paid internships
 4. Student loans
 5. Rich uncle

Let's go over these ...

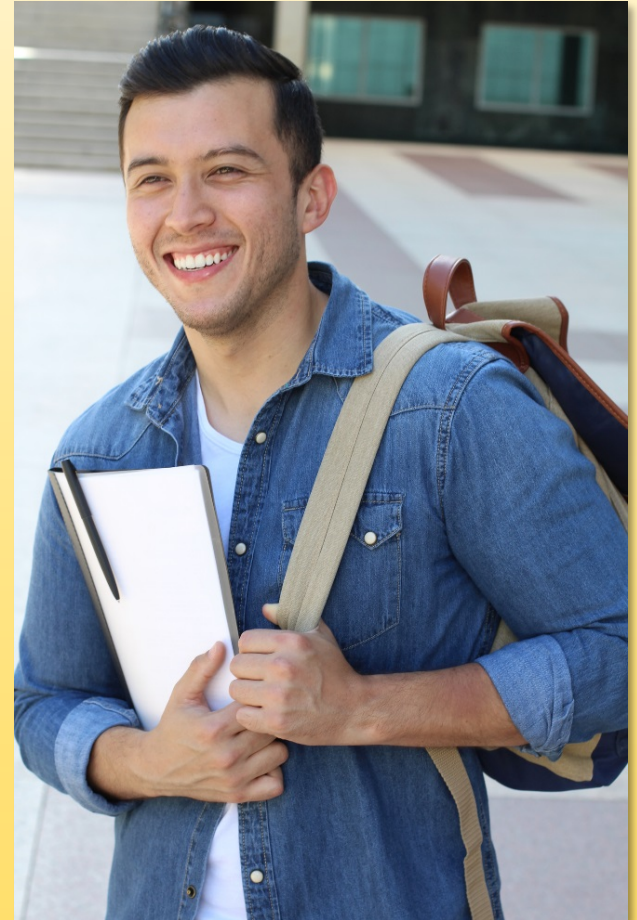




UCF Aid Programs

Financing to support study abroad - Programs administered by UCF:

- Novo Family Scholarships (\$2,000) – 2019 only for now, although also possibly beyond. Competitive as well as need-based.
- Burnett Honors College – grants available to students who are part of the BHC (~ \$1,000)
- UCF Abroad – Small need-based grants are available (~\$1,000)
- SGA – Provides small sums of \$\$ to cover some expenses (~ \$300 to \$500)
- IC CAE UCF National Security Scholarships (~\$3,000)



Novo Family Scholarship for International Study

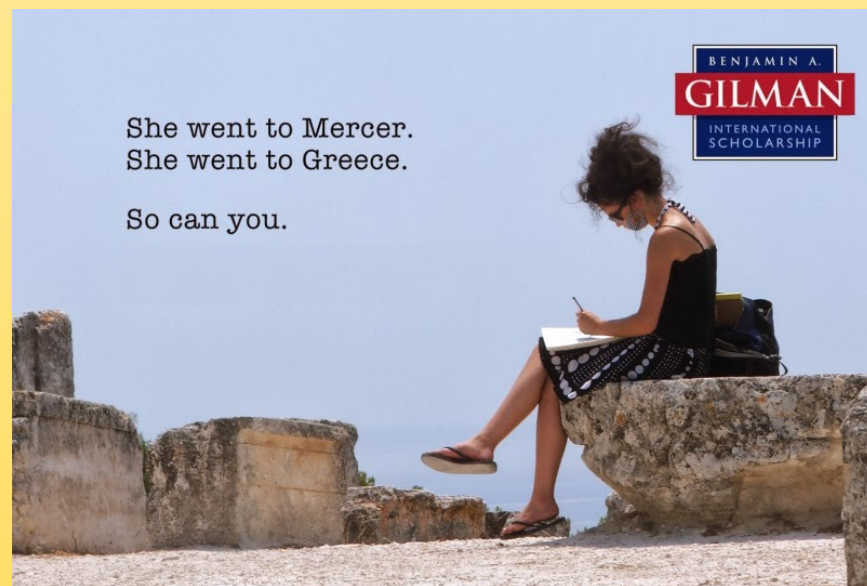
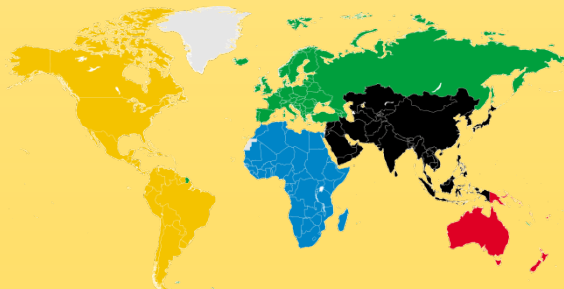
- New program
- Donation by one of our benefactors
- Scholarships to support study abroad will be awarded competitively for students going abroad in Fall 2018 and Spring 2019.
- Criteria will include mainly need but merit will also be considered.
- Students approved for study abroad will receive email notification when the application opens.



Third Party Organizations

Many organizations provide funds for study abroad

- The Gilman Foundation: www.iie.org/gilman
- The Lincoln Scholarship Program: [Google](#) it
- The Fulbright Program: www.fulbrightonline.org
- The Whitaker Foundation: www.whitakeraward.org
- National Security Education Program: www.iie.org/nsep
- StudyAbroad.com
- Foreign governments/institutions



Other Resources

- [Study Abroad Scholarships](#)
- [Domestic Exchange and Study Abroad Programs](#)
- [International Financial Aid and College Scholarship Search](#)
- [International Scholarships](#)
- [Financial Aid for Study Abroad](#)
- [Study Abroad Loans](#)
- [SIT Study Abroad](#)
- [Study Abroad Scholarships and Financial Aid](#)

Paid and Unpaid Internships

- There are a few opportunities to do paid internships, mostly in Germany.
- Very competitive, but can be very rewarding.
- Can be done by itself, or in addition to a semester of study abroad
- Need not speak a foreign language

**Upcoming information session strictly about
internship opportunities abroad:**

This Thursday, July 12, 2018

12:00 Noon to 1:30 PM

in this same room (EN2-103)



Rich Uncle?

Seriously, raise funds from:

- Parents
- Grandparents
- Uncles/aunts/cousins/siblings
- Anyone who has money!

Fastweb.com

Internationalscholarships.com

Tip: Create dedicated email address for scholarship applications





Step 4: Getting Ready to Go!

Pack your bags and go!

- Take ½ of what you think you need
- Do well in classes
- Write home often
- Enjoy!





Step 5: Returning to UCF

- Grades received from institution abroad will be converted to A/B/C/D/F and recorded on your student record
- File scholarship reinstatement appeal (if required)
- Share your experience!





International Engineering Program

Take the leap!





Interested? Then Contact:

Ms. Maureen Waked
407-823-2455
ENG I 107

Maureen.waked@ucf.edu

Dr. Avelino Gonzalez
407-823-5027
HEC 329

Avelino.gonzalez@ucf.edu

And be sure to visit:

www.cecs.ucf.edu/minors/internationalengineering/

<http://www.cecs.ucf.edu/study-abroad>

www.studyabroad.ucf.edu



Questions?



Back Up Slides

Question #1:

- Can I participate in the International Engineering program if the only language I speak is English?
- A) Yes
- B) No
- C) Maybe

Question #2:

- Can I participate in the International Engineering Program with limited resources?

A) Yes

B) No

C) Maybe

Question #3

- In what country is Jonkoping University?
 - a) Spain
 - b) United States
 - c) Sweden
 - d) Zimbabwe
 - e) Peru

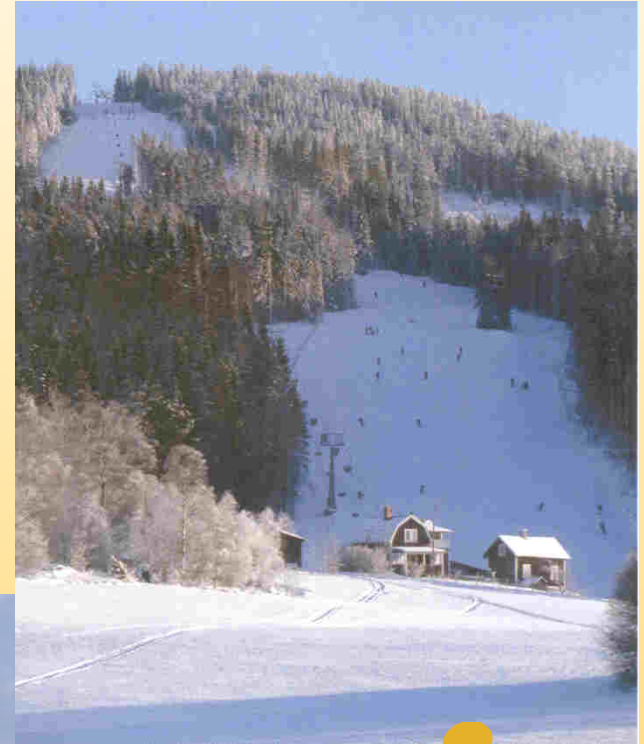
Jönköping University - Sweden

- ▣ Located in Jönköping, about 400 km southwest of Stockholm, 5 hours by train
- ▣ Beautiful, medium-sized city at foot of Lake Vatern (2nd largest in Sweden)



Mälardalen University - Sweden

- ▣ Medium-sized industrial city,
- ▣ Approx. 100 km west of Stockholm
- ▣ Easy access to Stockholm
 - ▣ 1 hour by train



Universidad de Cantabria - Santander, Spain

- Small, high quality university
- Located in Santander, a beautiful seaside resort city on the northern coast
- CECE is specialty



Universidad de Jaen – Jaen, Spain

- Excellent university
- Located in the “Paradise of the Interior” (of Spain)
- Near Granada



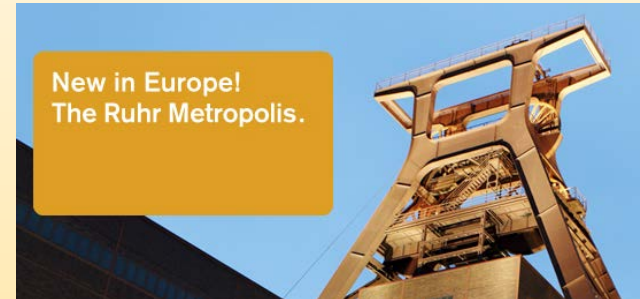
Technical University of Ilmenau - Germany

- One of the most prestigious technical universities in Germany
- Small city in the former East Germany
- Located in Thuringia - “The green heart of Germany”
- Rolling hills and beautiful countryside
- About 30 min. drive from Erfurt, a beautiful, medieval city



Westfälische Hochschule - Germany

- Mid-sized town in the industrial and cultural center of Germany – the Ruhr Region, European Capital of Culture in 2010
- A variety of traditional and alternative cultural offerings
- Strong on future energy
- Cooperation with Siemens Power Generation: Internships possible



University of Applied Sciences – Erfurt



- Nearly 5,000 students in different faculties including: Applied Computer Science, Civil Engineering, Engineering in Building, and Energy Technology
- Study in FH-Erfurt and TU-Ilmenau - courses are partly in English
- Intern at Siemens or N3EOS
- Beautiful medieval city dating back to 742 A.D.
- Capital of the state of Thuringia, located in the centre of Germany (2h->Berlin, 2h->Frankfurt, 4h->Munich...)
- 210,000 inhabitants



Zurich University of Applied Sciences, ZHAW, Winterthur, Switzerland

- 15 minutes by train to Zurich
- Home to many Swiss and international companies
- University town
- Programs in MAE, CS, IT taught in English



Available Fall and Spring semesters

Pontificia Universidade Catolica do Rio Grande do Sul - Porto Alegre, Brazil

- Excellent private university specializing in Aerospace Engineering
- Classes in Portuguese



Brno University of Technology – Brno, Czech Republic

- Technical university in the Czech Republic
- Near Prague and Vienna
- EE, CpE, CS and ME majors



Universidad de Costa Rica - San Jose, Costa Rica

- General university with many majors
- Most engineering disciplines covered
- Beautiful country with stunningly beautiful sights
- Low cost of living
- Classes in Spanish



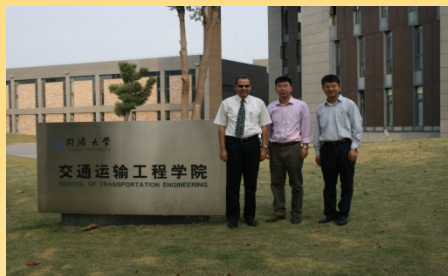
Instituto Tecnológico de Costa Rica – Cartago, Costa Rica

- Specializes in Engineering and CS
- Located in Cartago - the old capital of Costa Rica
- Low cost of living
- Classes in Spanish



Tongji University - Shanghai, China

- Shanghai is China's Second City and center of the economy
- Tongji University is one of two top universities in Engineering in China
- 55,000 Students (2437 International)
- 3300 Teaching & Research Faculty and Staff
- 1.16 Billion RMB Research Budget (\$170 million)



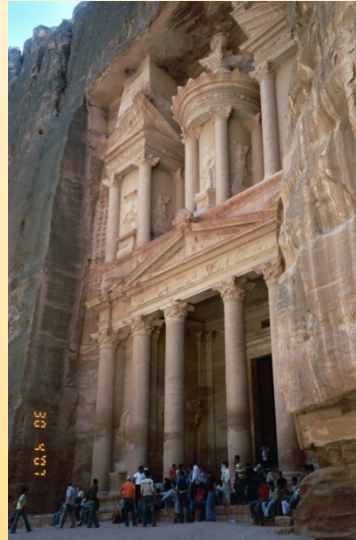
Other Current Study Locations

- Hong Kong
 - [HK Institute of Technology](#)
- Singapore
 - Nanyang Technical University



Possible Future Locations

- Italy
- Taiwan
- Japan
- South Korea
- India
- Chile
- Argentina
- Peru
- New Zealand
- Czech Republic



Université Joseph Fourier - Grenoble, France

- Located in the French Alps
- Financial aid available
- Numerous international students
- Programs in EE, CS and CpE taught in English



Europe



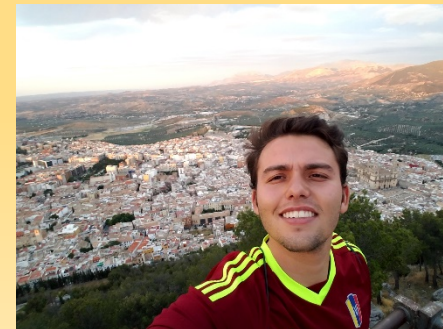
- Jonkoping University, Jonkoping, Sweden
- Malardalen University, Vasteras, Sweden
- Universidad de Cantabria, Santander, Spain
- Universidad de Jaen, Jaen, Spain
- Technische Universität Ilmenau, Ilmenau, Germany



COLLEGE OF
ENGINEERING &
COMPUTER
SCIENCE

Spring 2017 Student Rafael Ontiveros

Berlin, Brussels, Copenhagen, Jaen, Munich, Paris, Seville, Sophia, Stockholm, Valencia



- Sweden: Jonkoping University, Malardalen University,
- Spain: Universidad de Cantabria, Universidad de Jaen
- Switzerland: Zurich Institute of Applied Science,
- Ireland: Dublin Institute of Technology
- U.K.: University of Surrey,
- Germany: Technische Universität Ilmenau,
Fachhochschule Erfurt, Westfälische Hochschule,
- Czech Technical University, Prague, Czechia

- Jonkoping University, Jonkoping, Sweden
- Malardalen University, Vasteras, Sweden
- Universidad de Cantabria, Santander, Spain
- Universidad de Jaen, Jaen, Spain
- Zurich Institute of Applied Science, Switzerland
- Dublin Institute of Technology, Dublin, Ireland
- University of Surrey, Surrey, UK
- Technische Universität Ilmenau, Ilmenau, Germany
- Fachhochschule Erfurt, Erfurt, Germany
- Westfälische Hochschule, Gelsenkirchen, Germany
- Czech Technical University, Prague, Czechia