State of Engineering for Global Development

engineering FOR CHANGE

United States and Canada

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Disclaimer

To E4C's knowledge, this is the first report of this kind to attempt to list out all the programs and faculty who work in Engineering for Global Development. We recognize that there will likely be missing information in this first edition. If you identify any programs or professors that you believe should also be included in this report, please email us at info@engineeringforchange.org.

Motivation & Aim

Engineering for Global Development (EGD) is a growing field in which technology and design are utilized to support communities around the world and improve quality of life. This report attempts to comprehensively highlight the many programs and professors dedicated to this work in the United States and Canada with the intention to further connect and understand the state of EGD-related programs across the continent. It is our goal that this report will be used by students interested in pursuing EGD opportunities and members of institutions hoping to connect, collaborate, and share knowledge.

Method

The list of institutions with EGD programs was generated by a team of volunteers and E4C staff, representing four U.S-based higher-education institutions. Professors conducting graduate-level research were identified from this list of institutions and relevant conference proceedings. These lists were then reviewed by professors across the different disciplines for completeness.

Institutions that host Engineers Without Borders (EWB) Chapters as their only EGD-related program are not included in this list. However, it should be especially noted that there are over 300 US-based and 40 Canadian-based EWB Chapters in this region.

Overview

Results from our exploration show that 32 higher-educational institutions in the US and Canada now offer a variety of EGD opportunities for students through curricular and/or co-curricular programs and research. From these 32 institutions, the following EGD-related programs are available:

- Undergraduate degree: 3 institutions
- Graduate degree: 8 institutions
- Minors, certificates, & degree specializations: 14 institutions
- Coursework: 29 institutions
- Research centers: 28 institutions
- Experiential opportunities: 22 institutions

The programs included in this report range in size, sector of interest, and opportunities available. In addition to these programs:

161 professors across 67 institutions conduct EGD related research

This report highlights the many opportunities available for students to conduct research, complete coursework, receive degrees, and participate in experiential opportunities at institutions across the United States and Canada in EGD. The number of programs is continuing to grow and is gathering pace. These opportunities not

only prepare students for future careers in EGD, but also allow students to develop engineering design, teamwork, and project management skills. EGD teaching in universities often focuses on a collaborative approach in their relationships and partnerships with developing communities and economies.

There remain several opportunities for curricular EGD program growth and development in the United States and Canada. Of the 32 institutions included in this report, only five currently offer bachelors or masters degrees in related fields. Additionally, many institutions offer introductory and capstone classes, but lack vertical integration within their EGD programs leading to curricular gaps for students in their second and third year. Institutions with EGD programs have the opportunity to provide a context for engineering to teach the necessary skills and competencies that have not traditionally been included in engineering curriculum, which will ultimately prepare the next generation of engineers to innovate for the benefit of the common good.

Definitions

Engineering for Global Development (EGD) - EGD is an interdisciplinary practice that aims to improve the quality of life of underserved communities worldwide through the design and delivery of technology-based solutions combined with local capacity-building. To do this effectively, practitioners must integrate their technical training with an understanding of economics, entrepreneurship, social science and politics to benefit people living in poverty. Engineering education programs that support this definition are found at many institutions throughout North America. Program-specific aims and goals may be broader or further specialized than the definition presented here. Likewise, terminologies and titles vary - such as "global engineering", "humanitarian engineering", "engineering for international development" or "development design"; among others. Regardless of a lack of terminology-consensus in this field, this report includes those programs that E4C has identified as supporting our overarching definition of "EGD."

Undergraduate degree (BS/BA) - Associate's or bachelor's degrees offered at an institution of higher education, such as a university or college.

Graduate degree (MS/PhD) - Advanced academic degree programs, such as Master's and doctoral degrees offered at an institution of higher education, such as a university or college.

Minor - A curricular program offered at many institutions of higher education that allows students to a second academic discipline, in addition to their main course of study (major).

Courses - Curricular units of teaching that typically last one academic term. In this report, we include both graduate and undergraduate level coursework under this definition.

Experiential Opportunities - Experiential opportunities take place outside of a traditional classroom setting including fieldwork, internships, immersions, and study abroad.

Research - In this report, research is defined as practices that systematically investigate EGD-related topics, which lead to new conclusions and developments. These efforts are led by academic faculty members including professors, assistant professors, associate professors, and research professors.

Summary Table of EGD Programs in Canada & USA

Institution & Location	Program Name(s)	BS/BA	MS/PhD	Minor	Courses	Research	Experiential Opportunities
Canada							
Engineering Change Lab Canada	Global Engineering Certificate			X	X		X
University of Toronto ON, Canada	Center for Global Engineering, WERL			X	X	X	X
University of Western Ontario ON, Canada	International Development with Structural or Environmental Engineering				X		X
York University ON, Canada	Engineering & International Development Studies	X			X		X
USA							
Arizona State University AZ, USA	Global Resolve; Future of Innovation in Society; LEAPS	X	X	X	X	X	X
Brigham Young University UT, USA	Design Exploration					X	
Colorado School of Mines CO, USA	Humanitarian Engineering		X	X	X	X	X
Colorado State University CO, USA	Water and International Development track			X	X		
Drexel University PA, USA	Peace Engineering		X		X	X	X
Duke University NC, USA	Global Development Engineering Certificate			X	X		X
George Fox University OR, USA	Servant Engineering Program				X	X	
LeHigh University PA, USA	Creative Inquiry & Mountaintop Initiative				X		
Lipscomb University TN, USA	The Peugeot Center for Engineering Service in Developing Communities				X	X	X
Metro State University - Denver, CO, USA	Sustainable Systems Engineering Major	X			X		
Michigan Tech Michigan, USA	D80—Prosperity by Design			X	X	X	X
Massachusetts Institute of Technology MA, USA	D-Lab; GEAR Lab; International Development Group (Urban Planning)				X	X	X
Ohio State University OH, USA	Humanitarian Engineering Center			X	X	X	X

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Institution & Location	Program Name(s)	BS/BA	MS/PhD	Minor	Courses	Research	Experiential Opportunities
Oregon State University OR, USA	Humanitarian Engineering Program			X	X	X	X
Penn State University PA, USA	Humanitarian Engineering and Social Entrepreneurship (HESE)			X	X	X	X
Purdue University IN, USA	EPICS/GEPP			X	X	X	X
Santa Clara University CA, USA	Frugal Innovation Hub				X	X	X
SMU Lyle School of Engineering TX, USA	Hunter and Stephanie Hunt Institute for Engineering + Humanity					X	
Stanford Institute of Design CA, USA	d.school				X	X	
University of California - Berkeley CA, USA	Blum Center for Developing Economies; BEST Lab; Development Impact Lab; CITRIS; DE in Development Engineering		X		X	X	X
University of Colorado, Boulder CO, USA	Mortenson Center in Global Engineering; ICT4D		X	X	X	X	X
University of Dayton OH, USA	Engineers in Humanitarian Opportunities of Service Learning (ETHOS)				X	X	X
University of Michigan, MI, USA	Center for Socially Engaged Design; Global Health Design Institute; STEM-Africa; Michigan ICTD; Sienko Research Group; Global Design Lab		X		X	X	X
University of Nebraska NE, USA	Water for Food Institute		X		X	X	X
University of Oklahoma OK, USA	Water Technologies for Emerging Regions (WaTER) Center			X	X	X	X
University of Pittsburgh PA, USA	International Capstone				X		
University of Texas, Austin TX, USA	Humanitarian Engineering Certificate			X	X		
University of Washington, WA, USA	ICTDLab					X	
Villanova University PA, USA	Sustainable Engineering for International Development Initiative		X		X		X

EGD Program Descriptions

[BEST Lab](#), University of California, Berkeley, CA, USA
>   **Research:** Mechanical engineering lab with a research focus on design for development, sustainable energy, and design theory.

[Blum Center for Developing Economies](#), University of California, Berkeley, CA, USA
>   **Graduate:** Designated Emphasis in Development Engineering; 2 core classes: Design, Evaluate, and Scale Development Technologies, Development Engineering Research and Practice Seminar; 3 elective thematic modules: Problem Identification and Project Design, Evaluation Techniques and Methods for Measuring Social Impact, Development Technologies
>   **External collaborations:** NSF; Innovations at the Nexus of Food, Energy, and Water Systems, USAID

[Centre for Global Engineering](#), University of Toronto, ON, CA
>   **Undergraduate:** Global Engineering Certificate; courses; Global Engineering capstone; research projects
>   **Graduate:** Global Engineering Certificate; courses; research projects
>   **Research:** paid summer opportunities for undergraduates;
>   **Experiential opportunity:** Paul Cadario Doctoral Fellowship in Global Engineering, Metcalfe Family Graduate Fellowship for Sustainable Energy Research
>   **External collaborations:** BRAC, World Vision, Seeds of Peace, Tokyo Tech, Bloorview Research Institute, Winds of Change, Vietnam National Institute for Science and Technology Policy and Strategy Studies, University of Dhaka.

[Center for Socially Engaged Design (C-SED)](#), University of Michigan, MI, USA
>   **Undergraduate:** Campus and field courses, workshops, and online modules for socially-engaged design.
>   **Graduate:** MS in Design Science with tracks available in (1) Global Health Design, (2) Sustainable Design and Systems Evaluation, and (3) Socially Engaged Design.

[Center for Information Technology Research in the Interest of Society (CITRIS)](#), University of California, CA, USA
>   **Research:** Research centers at UC Berkeley, Davis, Merced, and Santa Cruz campuses

[Creative Inquiry & Mountaintop Initiative: Inquiry to Impact Projects](#), Lehigh University, PA, USA
>   **Undergraduate/Graduate:** Semester-long group projects to create impact; Global Social Impact Fellowship Program.

[D80: Prosperity by Design](#), Michigan Tech, MI, USA
>   **Undergraduate:** Humanitarian Engineering Minor; Peace Corps Fellows Program
>   **Research:** Open Sustainability Technology research group
>   **Experiential opportunity:** Conferences, idesign, field work opportunities
>   **External collaborations:** EWB-USA

[Design Exploration](#), Brigham Young University, UT, USA
>   **Research:** Mechanical engineering lab with a research focus on design for development, optimization, and product reconfiguration.

[Development Impact Lab](#), University of California, Berkeley, CA, USA
>   **Research:** Opportunities for undergraduates and graduates through the Blum Center for Developing Economies and the Center for Effective Global Action (CEGA).

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[D-Lab](#), Massachusetts Institute of Technology, MA, USA
  Undergraduate/Graduate: 20+ undergraduate and graduate courses; social entrepreneurship fellowships
  Research: Field research, graduate-level research partnerships
  Experiential opportunity: Design and innovation summits, workshops, fieldwork

[d.school](#), Stanford Institute of Design, CA, USA
  Undergraduate/graduate: Design center; innovation center; executive education; undergraduate and graduate courses
  Research: Research and innovation center
  External collaborations: Rare International, Shonaquip, Fenix International, Proximity Designs, Miraclefeet, Project Health Children / Sanku, Off Grid Electric / Zola, EarthEnable, d.light, Noora Health, D-Rev, Burro, Lifebox, Ecofiltro, SmileTrain, ReSurge International

[Drexel University](#), Philadelphia, PA, USA
  Undergraduate/graduate: Master's in Peace Engineering, Online Certificate in Peace Engineering
  Research: Peacetech Lab, Urban technical extension

[Engineering & International Development Studies](#), York University, ON, CA
  Undergraduate: BEng + BA five-year program in Engineering & International Development Studies
  Experiential opportunity: International Internship Program

[Engineering Projects in Community Service (EPICS)](#), Purdue University, IN, USA
  Undergraduate: Long term, collaborative service-learning design course

[Engineers in Technical Humanitarian Opportunities of Service Learning (ETHOS)](#), University of Dayton, OH, USA
  Undergraduate/Graduate: 3-credit ETHOS course
  Experiential opportunity: 10-week international immersions; 10-day breakout trips; semesters of service; local immersions; ETHOS Club

[Engineers Without Borders - Canada (EWB-CA)](#), Canada
  Experiential opportunity: University-based EWB chapters in Canada engage in EGD-related projects domestically and internationally.

[Engineers Without Borders - USA (EWB-USA)](#), USA
  Experiential opportunity: University-based EWB chapters in the US engage in EGD-related projects domestically and internationally.

[Frugal Innovation Hub](#), Santa Clara University, California, USA
  Undergraduate: Senior design projects, faculty led research projects
  Experiential opportunity: Exchange program with Hamburg University of Technology
  External collaborations: Engineering World Health, Hamburg University of Technology, IEEE

[GEAR Lab](#), Massachusetts Institute of Technology, MA, USA
  Research: Mechanical design lab with a research focus on water, agriculture, assistive devices, and power.

[Global Design Lab](), University of Michigan, MI, USA
Research: Mechanical design lab with a research focus on complex systems design, and engineering for emerging markets.

[Global Development Engineering Certificate](), Duke University, NC, USA
Undergraduate: Certificate in Global Development in Engineering; undergraduate-level EGD courses; engineering capstone in (1) Sustainable Design and Global Community, (2) Energy and Environmental Design, (3) Design for the Developing World.
External collaborations: Engineers in Action, Bringing Hope to the Family, the Duke Global Health Institute, the Duke Lemur Center

[Global Engineering Certificate](), Engineering Change Lab, Canada
Undergraduate: A certificate in Global Engineering available through the Engineering Change Lab for students enrolled in Memorial University of Newfoundland and University of British Columbia.

[Global Engineering Programs and Partnerships (GEPP)](), Purdue University, IN, USA
Undergraduate: Global Engineering Studies Minor, 2 core classes, 2-3 global engineering experiences; Engineering Study Abroad, 12 credits of foreign language, domestic internship or research experience, 3 credits of cultural orientation, 1 semester of study abroad
Research: Innovation for International Development Lab
External collaborations: Universidad de Nariño, Pasto, Colombia, Universidad de los Andes, Bogotá, Colombia, Universidad Pontificia Javeriana, Cali, Colombia, University of the West Cape, South Africa, American University of the Caribbean, Haiti, Kwame Nkrumah University of Science and Technology, Ghana, Purdue University, Penn State University, Colorado School of Mines

[Global Health Design Initiative](), University of Michigan, MI, USA
Undergraduate: Multidisciplinary Design: Global Health Design Minor
Experiential opportunities: Internships, research, and international projects.

[Global Resolve](), Arizona State University, AZ, USA
Experiential opportunity: Undergraduate students work on co-curricular projects in collaboration with international universities, residents of rural villages, local governments, financial institutions, and nongovernmental organizations (NGOs) on various EGD projects.
External collaborations: Ashesi University, CEESD Ghana, Esperanca, IIT Delhi, National Peace Corps Association, University of the West Indies, ASME, Groningen University, Tribhuvan University, Penn State, Aprotech, Monterrey Tech, Kumasi Polytechnic, The University of Trinidad and Tobago, Jaipur Food, Sunbridge Salon, Andes Libres, SCOPE, Namuna Biomass, WaterIsLife, Kwame Nkrumah University of Science and Technology - Ghana.

[Humanitarian Engineering](), Colorado School of Mines, CO, USA
Undergraduate: Engineering for Community Development Minor; Leadership in Social Responsibility Minor; 14 undergraduate courses; research; service learning and internships; and undergraduate scholarships.
Graduate: MS in Humanitarian Engineering and Science; MS in Humanitarian Engineering: Humanitarian Geophysics.
Experiential opportunity: Mines without Borders; Habitat for Humanity; Project Cure; and other internships.
External collaborations: Universidad Nacional de Colombia; Uniminuto (Colombia); Pontificia Universidad Catolica de Peru.

[Humanitarian Engineering](#), Oregon State University, OR, USA
- Undergraduate: Humanitarian Engineering Minor; campus courses; field courses
- Research: Undergraduate and graduate research opportunities for students in a variety of majors
- Experiential opportunity: Evans Family Graduate Fellowship

[Humanitarian Engineering Center](#), Ohio State University, OH, USA
- Undergraduate/Graduate: Humanitarian Engineering Minor, 6 courses (grad/undergrad-level)
- Research: Graduate and faculty research in humanitarian engineering-related topics
- Experiential opportunity: Domestic and international projects, 8 humanitarian engineering student organizations.
- External collaborations: Universidad de Nariño, Pasto, Colombia, Universidad de los Andes, Bogotá, Colombia, Universidad Pontificia Javeriana, Cali, Colombia, University of the West Cape, South Africa, American University of the Caribbean, Haiti, Kwame Nkrumah University of Science and Technology, Ghana, Purdue University, Penn State University, Colorado School of Mines

[Humanitarian Engineering Certificate](#), University of Texas at Austin, TX, USA
- Undergraduate: 18 credit hours, Required Humanitarian Engineering Seminar; 4 credits of humanitarian engineering project courses
- External collaborations: IHE-Delft

[Humanitarian Engineering and Social Entrepreneurship (HESE)](#), Penn State University, PA, USA
- Undergraduate/Graduate: 5 courses; Certificate in Engineering and Community Engagement; Entrepreneurship & Innovation (ENTI) minor
- Research: Field research opportunities
- Experiential opportunity: 3-weeks of fieldwork as part of HESE certificate program
- External collaborations: Universidad de Nariño, Pasto, Colombia, Universidad de los Andes, Bogotá, Colombia, Universidad Pontificia Javeriana, Cali, Colombia, University of the West Cape, South Africa, American University of the Caribbean, Haiti, Kwame Nkrumah University of Science and Technology, Ghana, Purdue University, Penn State University, Colorado School of Mines

[Hunter and Stephanie Hunt Institute for Engineering and Humanity](#), SMU Lyle School of Engineering, TX, USA
- Research: Research and Innovation Center partnered with leaders in business, academia, NGOs and governments
- External collaborations: Dwell Earth, EWB-SMU

[ICTD, Atlas Institute](#), University of Colorado-Boulder, CO, USA
- Graduate: Information and Communication Technology for Development (ICTD) track in the Technology, Media & Society MS program; field-based practicum, courses

[ICTDLab](#), University of Washington, WA, USA
- Research: Graduate level research including ways of utilizing HCI, Systems, Communication and Data Analytics for underserved communities.

[International Capstone](#), University of Pittsburgh, PA, USA
- Undergraduate: international capstone option for Civil Engineering students
- External collaborations: EWB-USA

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[International Development Group](#), Urban Studies & Planning, Massachusetts Institution of Technology, MA, USA
    Graduate: Academic track for students pursuing a Master's or PhD in Urban Planning.
    Research: Graduate level research in topics such as development, technology, globalization, transportation, water and sanitation; among others.

[International Development with Structural or Environmental Engineering](#), University of Western Ontario, ON, CA
    Undergraduate: Four undergraduate courses: international development for engineers, appropriate technologies for international development, advanced topics in international development for engineers, special topics in international development
    Experiential opportunity: Summer Community Development Placement and Design Project

[Laboratory for Energy & Power Solutions (LEAPS)](#), Arizona State University, AZ, USA
    Research: Mechanical engineering lab with a research focus on micro-grid power, resilient infrastructure.

[Michigan ICTD](#), University of Michigan, MI, USA
    Experiential opportunity: Seminar series, workshops
    Research: Topics include ICT in the global south and ICT in low-income communities in the U.S, politics, etc.

[Mortenson Center in Global Engineering](#), University of Colorado at Boulder, CO, USA
    Undergraduate: Global Engineering Minor; Engineering for Developing Communities specialization for environmental engineering students
    Graduate: Professional Master's in Global Engineering (Civil Engineering MS Degree), Professional Master's in Global Environmental Engineering (Environmental Engineering MS Degree), Graduate Certificate in Global Engineering.
    Research: Research center in global engineering
    Experiential opportunity: 2-6 month international placement with host agency
    External collaborations: USAID, IRC WASH, Bridges to Prosperity, Millennium Water Alliance, Emory University, IBM Research

[Servant Engineering Program](#), George Fox University, OR, USA
    Undergraduate: Courses; summer research projects
    External collaborations: Engineers in Action, Bringing Hope to the Family, the Duke Global Health Institute, the Duke Lemur Center

[Sienko Research Group](#), University of Michigan, MI, USA
    Research: Mechanical design lab with a focus on global health design and design science.

[STEM-Africa](#), University of Michigan, MI, USA
    Experiential opportunity: Conferences, SEED grants, early-career faculty support, and research opportunities for science, technology, engineering, and mathematics projects in Africa

[Sustainable Engineering for International Development Initiative](#), Villanova University, PA, USA
    Graduate: MS in Sustainable Engineering (30 credit program)
    Experiential opportunities: undergraduate/graduate 1-2 week field immersion projects over fall, winter, and spring breaks; 8-week summer internships; year of service
    External collaborations: UNICEF, Water for Wasala, Nova Mobile Health, Chepo Bayano Mission, Wells for Relief, Profugo, Catholic Relief Services, Golden West Humanitarian Foundation, Caramanico Foundation School

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[Sustainable Systems Engineering](#), Metro State University, CO, USA
   Undergraduate: A BS program applying systems engineering to sustainable development.

[The Future of Innovation in Society](#), Arizona State University, AZ, USA
   Graduate: Global Technology and Development MS; Innovation in Global Development PhD; graduate-level certificates in (1) Responsible Innovation in Science, Engineering and Technology and (2) Global Development and Innovation.
   Undergraduate: BA/BS in Innovation in Society; Innovation in Society Minor; and Innovation for Impact Certificate.
   Research: The following research centers at ASU are associated with these programs: Risk Innovation Lab; Center for Energy and Society; Center for Smart Cities and Regions; and Center for Innovation, Development and Society.

[The Peugeot Center for Engineering Service in Developing Communities](#), Lipscomb University, TN, USA
   Experiential opportunities: International engineering-focused service trips
   External collaborations: Adicay (Asociacion para el Desarrollo Integral Comun) in Guatemala; HOI, Predisan, Little Hands Big Hearts in Honduras; Village of Hope in Ghana

[Water and Energy Research Lab (WERL)](#), University of Toronto, ON, CA
   Research: Mechanical and industrial engineering lab with a research focus on food, water, sanitation, healthcare, and energy.

[Water and International Development track (Civil & Environmental Engr.)](#), Colorado State University, CO, USA
   Graduate: Certificate in Water and International Development available for MS/PhD in Civil or Environmental Engineering

[Water for Food Institute](#), University of Nebraska, Nebraska, USA
   Graduate: Double Masters degrees focused on water and food challenges (partnered with IHE-Delft)
   Research: Environmental engineering lab with a research focus on water management and water quality systems.
   Experiential opportunity: workshops; annual conference; seminar series; summer field course for graduate students and academics/professionals, student scholarships
   External collaborations: IHE-Delft

[Water Technologies for Emerging Regions (WaTER) Center](#), University of Oklahoma, OK, USA
   Undergraduate: Minor in Water and Sanitation for Health and Sustainable Development; 18 credit hours; 3-week international trip
   Research: Lab with a research focus in water and sanitation
   Experiential opportunity: 3-week international trip
   External collaborations: Sooners Without Borders

EGD Conferences

The following list presents some of the top conferences with an EGD focus or an available EGD-related track.

ACM Conference on Human Interaction (CHI) [link](#)

AidEx [link](#)

ASME International Design Engineering Technical Conference (IDETC) [link](#): Engineering for Global Development Forum and symposium track

Colorado WASH Symposium [link](#)

Design of Medical Devices Conference [link](#)

Dubai International Humanitarian Aid and Development Conference (DIHAD) [link](#)

Engineers in Technical and Humanitarian Opportunities of Service (ETHOS) Conference [link](#)

Global Grand Challenges Summit [link](#)

Humanitarian Technology: Science, Systems and Global Impact [link](#)

ICT4D Conference [link](#)

ICTDX Conference [link](#)

IEEE Global Humanitarian Technology Conference (GHTC) [link](#)

Institute for Sustainability Conferences [link](#): Bioenergy Sustainability Conference, Industrial Water Use and Re-use Workshop, Food-Water-Energy Nexus, Engineering Sustainable Development, Sustainable Packaging Symposium, Global Symposium on Waste Plastic

International Conference on Social Implications of Computers in Developing Countries [link](#)

International Conference on Sustainable Agriculture Technologies (ICSAT) [link](#)

International Design Conference [link](#)

Monitoring, Evaluation, Research, and Learning (MERL) in Development Tech [link](#)

University of North Carolina Water & Health Conference [link](#)

University of Michigan Sustainability & Development Conference [link](#)

World Congress of Innovative Technology and Sustainable Engineering [link](#)

Global Facility for Disaster Reduction and Recovery Conferences [link](#)

The State of EGD Research

Faculty included in this section conduct current, graduate-level, EGD-related research at higher-educational institutions in the United States and Canada. Included in the definition of researchers conducting EGD work are engineers, computer scientists, architects, and urban planners. **We recognize that this list may not be comprehensive and will naturally change overtime, please contact us at info@engineeringforchange.org if you know of a faculty member who is missing from this list.**

Mechanical, Industrial, and Systems Engineering					
Faculty	Institution	Sectors	Faculty	Institution	Sectors
Agogino, Alice	UC Berkeley	General	Mattson, Christopher	Brigham Young Univ.	Water, Energy
Austin-Breneman, Jesse	Univ. of Michigan	General	McComb, Chris	Penn State Univ.	Health
Bilton, Amy	Univ. of Toronto	Water, Energy, Agriculture	Mehta, Khanjan	Lehigh Univ.	ICT, Agriculture, Health
Brown, Aaron	Metro State Univ. of Denver	Energy, Water	Menold, Jessica	Penn State Univ.	Health
Bryden, Mark	Iowa State Univ.	Energy	Modi, Vijay	Columbia Univ.	Energy
Chan, Timothy C.Y.	Univ. of Toronto	Health	Oakes, William	Purdue Univ.	General
Clarke-Sather, Abigail	Univ. of Minnesota	Health	Olivetti, Elsa	MIT	Energy
Fox, Mark	Univ. of Toronto	ICT	Rogers, Bradley	Arizona State Univ.	Energy
Frey, Dan	MIT	General	Sharp, Kendra	Oregon State Univ.	Energy, Water, Agriculture
Gershenson, John	Penn State Univ.	Health	Sienko, Kathleen	Univ. of Michigan	Health
Henderson, Mark	Arizona State Univ.	Water	Telenko, Cassandra	Georgia Tech Univ.	Energy
Johnson, Nathan	Arizona State Univ.	Energy	Thomas, Evan	Univ. of Colorado, Boulder	Energy, ICT
Lucena, Juan	Colorado School of Mines	General	Winter, Amos	MIT	Energy, Agriculture, Water, Health
MacCarty, Nordica	Oregon State Univ.	Energy, Water, ICT	Yih, Yuehwern	Purdue	Health

Electrical Engineering, Computer Science, and Information Science

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Aitchison, J Stewart	Univ. of Toronto	ICT, Health	Guha, Shion	Marquette Univ.	ICT
Ahmed, Ishtiaque	Univ. of Toronto	ICT	Heimerl, Kurtis	Univ. of Washington	ICT
Anderson, Richard	Univ. of Washington	ICT, Health	Hosman, Laura	Arizona State Univ.	ICT, Energy
Bar, Francois	Univ. of Southern California	ICT	Johri, Aditya	George Mason Univ.	ICT
Belding, Elizabeth	Univ. of Santa Barbara	ICT	Khan, Emdad	Southern Univ.	ICT
Berger, Paul	Ohio State Univ.	Energy	Kolko, Beth	Univ. of Washington	ICT
Best, Mike	Georgia Tech Univ.	ICT	Kumar, Neha	Georgia Tech Univ.	ICT
Blumenstock, Joshua	UC Berkeley	ICT	Lobell, David	Stanford Univ.	ICT, Agriculture, Health, Habitat
Brewer, Eric	UC Berkeley	ICT, Energy	Maitland, Carleen	Penn State Univ.	ICT
Burke, Marshall	Stanford Univ.	ICT, Habitat, Agriculture	Meng, Amanda	Georgia Tech Univ.	ICT
Burrell, Jenna	UC Berkeley	ICT	Nakasone, Eduardo	Michigan State Univ.	ICT
Chakraborty, Sunandan	Indiana Univ.	ICT	Nardi, Bonnie	UC Irvine	ICT
Chen, George	Carnegie Mellon	ICT, Health, Agriculture	Naseem, Mustafa	Univ. of Michigan	ICT, Health
Daniels, Malcolm	Univ. of Dayton	Energy	Ogan, Amy	Carnegie Mellon	ICT
Dell, Nicola	Cornell Univ.	ICT	Pal, Joyojeet	Univ. of Michigan	ICT
Dye, Michaelanne	Georgia Tech Univ.	ICT	Parikh, Tapan	Cornell Univ.	ICT, agriculture, health
Ermon, Stefano	Stanford Univ.	ICT	Passino, Kevin	Ohio State Univ.	Health
Fletcher, Rich	MIT	ICT, Health, Agriculture	Pearce, Joshua M.	Michigan Tech	ICT, Energy, Habitat
Frias-Martinez, Vanessa	Univ. of Maryland	ICT	Raghavan, Barath	UC Berkeley	ICT
Gomez, Ricardo	Univ. of Washington	ICT	Rahmani, Ashiyan Ian	Univ. of Hawaii	ICT
Grzeslo, Jenna	SUNY New Paltz	ICT	Rajan, Siddharth	Ohio State Univ.	Energy, Water

Electrical Engineering, Computer Science, and Information Science *cont.*

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Savage, Saiph	West Virginia Univ.	ICT	Vashistha, Aditya	Univ. of Washington	ICT
Saxenian, AnnaLee	UC Berkeley	ICT	Veinot, Tiffany	Univ. of Michigan	ICT
Sharmin, Moushumi	Western Washington Univ.	ICT, Health	Vigil-Hayes, Morgan	Northern Arizona Univ.	ICT
Subramanian, Lakshmi	New York Univ.	ICT	Wyche, Susan	Michigan State Univ.	ICT
Taneja, Jay	Univ. of Massachusetts, Amherst	Energy, ICT	Zarinni, Fatima	New York Univ.	ICT
Toyama, Kentaro	Univ. of Michigan	ICT, Health, Agriculture	Zheng, Yuan	Ohio State Univ.	ICT
Vannini, Sara	Univ. of Washington	ICT			

Environmental and Civil Engineering

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Amadei, Bernard	UC Boulder	General	Boehm, Alexandria	Stanford Univ.	Sanitation
Anctil, Annick	Michigan State	Energy, Habitat	Brown, Joe	Georgia Tech Univ.	Water
Arumugam, Sankar	NC State Univ.	Water	Chamberlain, Jim	Univ. of Oklahoma	Water, Sanitation
Baker, Kelly	University of Iowa	Water, Health, Sanitation	Chen, Bing	Memorial Univ. of Newfoundland	Water
Bareither, Christopher	Colorado State Univ.	General	Davis, Jenna	Stanford Univ.	Sanitation, Water
Bartram, Jamie	Univ. of North Carolina	Water, Health	de los Reyes, Francis	NC State Univ.	Water
Bills, Tierra	Wayne State Univ.	Transport	Dorea, Caetano	Univ. of Victoria	Water, Sanitation
Bischel, Heather	Univ. of California, Davis	Water, Sanitation	Elliot, Mark	Univ. of Alabama	Water, Sanitation, Health
Bitsuamlak, Girma	Western Univ.	Energy, Habitat	Fisher, Michael	Univ. of North Carolina	Water, Sanitation
Black, Kerry	Univ. of British Columbia	Water	Gadgil, Ashok	UC Berkeley	Water, Energy

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Gerhard, Jason	Western Univ.	Sanitation, Health	Miranda, Mario Javier	Ohio State Univ.	Agriculture
Gute, David	Tufts Univ.	Health	Navab-Daneshmand, Tala	Oregon State Univ.	Health, Water
Harris, Angela	NC State Univ.	Water, Sanitation	Nelson, Kara	UC Berkeley	Water, Sanitation
Horvath, Arpad	UC Berkeley	Energy, Transportation, Water	Pickering, Amy	Tufts Univ.	Health, Water
Hossain, Anwar	Ryerson Univ.	Habitat	Pokhrel, Yadu	Michigan State Univ.	Habitat, Water
Javernick, Amy	Univ. of Colorado, Boulder	Water, Sanitation	Robinson, Claire	Western Univ.	Water, Sanitation
Jellison, Kristen L.	LeHigh Univ.	Health, Water	Sabatini, David	Univ. of Oklahoma	Water
Jeuland, Marc	Duke Univ.	Energy, Health	Salzberg, Aaron	Univ. of North Carolina	Water, Sanitation, Energy
Kearns, Joshua	NC State Univ.	Water, Sanitation	Schaad, David	Duke Univ.	Water, Health
Knox, Robert	Univ. of Oklahoma	Water	Schwab, Kellogg	Johns Hopkins Univ.	Water, Health
Kumpel, Emily	Univ. of Massachusetts, Amherst	Water, Sanitation, ICT	Sengupta, Arup K.	LeHigh Univ.	Water, Sanitation
Lall, Upmanu	Columbia University	Water	Stewart, Jill	Univ. of North Carolina	Water
Lantagne, Daniele	Tufts	Water, Sanitation	Straube, John	Univ. of Waterloo	Habitat, Energy
Linden, Karl	Univ. of Colorado, Boulder	Water	Taylor, David	Univ. of Toronto	Water, Sanitation
Mellor, Jonathan	Univ. of Connecticut	Water, Health	Thomas, Evan	Univ. of Colorado, Boulder	Water
Mendoza-Sanchez, Itza	Texas A&M	Health, Sanitation	Trotz, Maya	Univ. of South Florida	Water
Mihelcic, James	Univ. of South Florida	Water, Sanitation	Watkins, David	Michigan Tech	Water,
Milne, Ellison	Colorado State Univ.	Health	Yanful, Ernest	Western Univ.	Water, Sanitation

Chemical, Biological, and Agricultural Engineering

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Adhiraki, Umesh	Michigan State Univ.	Agriculture	Cheng, Yi-Ling	Univ. of Toronto	Sanitation, Health
Bakshi, Bhavik	Ohio State Univ.	Water, Energy	Eisenhower, Dean	Univ. of Nebraska	Agriculture, Habitat, Water
Chan, Arthur	Univ. of Toronto	Health			

Urban Planning, Architecture, and Transportation

Faculty	Institution	Sectors	Faculty	Institution	Sectors
Acey, Charisma	UC Berkeley	Habitat, Transportation, Water, Sanitation	Ibrahim, Nadine	Univ. of Waterloo	Habitat, Energy
Badami, Madhav G.	McGill Univ.	Transportation	Keough, Noel	Univ. of Calgary	Habitat, Energy
Berney, Rachel	Univ. of Washington	Habitat	Lara, Jesus	Ohio State Univ.	Habitat
Carolini, Gabriella	MIT	Water, Habitat, Sanitation, Health	Karns, Alex	Univ. of Texas - Austin	Transport
Cowles, Sarah	Ohio State Univ.	Architecture	Klein, Nicholas	Cornell Univ.	Habitat, Transport
Crane, Randall	UCLA	Transportation	Thompson, Sally E.	UC Berkeley	Habitat, Water
Defries, Ruth	Columbia Univ.	Habitat, Agriculture,	Tsenkova, Sasha	Univ. of Calgary	Habitat
Hutson, Malo	Columbia Univ.	Habitat	Wendel, Delia	MIT	Habitat
Vance, Ulysses Sean	Temple Univ.	Habitat	Whittington, Jan	Univ. of Washington	Habitat