

*“ The class consisted of students with very diverse backgrounds, ranging from public policy to public health and engineers.”  
Aline, student ”*

# HUMANITARIAN ENGINEERING ▶ COURSE

REGISTER FOR  
**SPRING  
SEMESTER** 2021

FOR INQUIRIES  
[healthengineering@aub.edu.lb](mailto:healthengineering@aub.edu.lb)



FOR MORE INFO  
[www.aub.edu.lb/msfea/Pages/humanitarian.aspx](http://www.aub.edu.lb/msfea/Pages/humanitarian.aspx)

#humanitarianengineer

## THE HUMANITARIAN ENGINEERING INITIATIVE

The initiative was created as a partnership between the Faculty of Health Sciences (FHS) and the Maroun Semaan Faculty of Engineering and Architecture (MSFEA) at the American University of Beirut (AUB). In a rapidly changing context fraught with conflict and a rise in the burden of disease, there is an ever-growing need for innovative, multidisciplinary solutions to emerging public health problems in the Arab region. The broad objective of the Humanitarian Engineering Initiative is to combine disciplinary methods to address global challenges, which is particularly important given rapid transitions in health in the region, and the urgency of meeting the Sustainable Development Goals (SDGs).



## THE COURSE

The course “Design of Engineering Solutions for Health Challenges in Crises” was developed by AUB’s FHS and MSFEA in collaboration with Boston University. The course encourages participants to use engineering design to address humanitarian challenges, bridging the gap between practitioners, engineers, scientists, NGOs, and social entrepreneurs to generate health solutions for populations in protracted crises. The course model is made of several components including interactive lectures and field visits to humanitarian settings, including interactive lectures, field work and mentorship. Participants work in teams to conduct needs assessments, identify problems, ideate, design, and prototype solutions.

Be ready  
to *make*  
a difference

Take lead  
in *designing*  
impactful  
interventions



## WHAT WILL YOU LEARN?

### How to:

- Apply participatory needs assessment tools in humanitarian settings
- Identify public health problems in humanitarian settings
- Apply formal design processes from different disciplines for the design of relevant and feasible solutions and interventions given a set of constraints
- Apply relevant appropriate technologies to prototype the designs
- Use effective communication tools to promote the solution to a diverse audience
- Work effectively in a team with diverse backgrounds and perspectives

### When:

Spring Semester 2021  
3 credits course  
*(full-time participation expected)*

### Who:

Undergraduate and graduate students from all majors, faculty members, health professionals, engineers, innovators, and entrepreneurs can apply.



## HOW TO REGISTER:

AUB students interested in taking the course for credit during the Spring 2021 term can register the cross listed course under either:

- PBHL 220 (GE social science)
- BMEN 798CC (engineering technical elective/special topics course), or
- PBHL 320CC (public health technical elective)

Practitioners and students interested in registering the course for a certificate of participation are kindly requested to email us for more information.