

# Development Engineering

CSEP 590B

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# Development Engineering Discussion

## June 8

- Temina Madon and Anustubh Agnihotri
- Building a field
  - Humanitarian Engineering (Civil, Water, Sanitation, Power, Disaster Relief)
  - Development Economists
  - Information Technology for Development
- Open Access Textbook
  - 5 Chapter Authors + 2 Section Editors spoke in class
- Discussion topics
  - What are the main themes from the field
  - Is there background that would have been helpful for this course
  - Feedback on Development Engineering from Software Engineering perspective

# Course Schedule

Date	Topic	Lead
March 30	Course Introduction	Richard Anderson
April 6	Engineering the Vaccine Cold Chain	Richard Anderson
April 13	Community Cellular Networks	Kurtis Heimerl
April 20	Remote Temperature Monitoring	Martin Lukac, Nexleaf
April 27	Election Monitoring	James Long
May 4	Global Goods Software	Skye Gilbert
May 11	Voice Based Social Networks	Aditya Vashistha
May 18	Open Data Kit	Waylon Brunette
May 26	Removing Arsenic from Drinking Water	Ashok Gadgil
June 1	Fintech for Rural Networks	Jenny Aker
June 8	Development Engineering Discussion	Temina Madon and Anustubh Agnihotri

# Development Engineering

Technological interventions to improve human and economic conditions in low-resource settings

Technical aspects of development engineering  
Context for development engineering

How is development engineering practiced in different settings and domain

# Course Background

- CSEP 590B: Information Computing and Development
  - 4-unit course in professional master's program
- Approaches to teaching ICTD
  - Domain based: Applications to Health, Agriculture, Communication, . . .
  - Technology based: Basic Phones, Smart Phones, Devices, AI, Cloud technologies
- Opportunity: Development Engineering Course
  - Initial idea – use the in-progress text book
  - Second idea – attempt to get textbook authors present work
- And then the virus struck
  - Course already was scheduled as a distance course
  - Zoom probably made outside speaker scheduling easier

# Course reflection

- Engineering Approach
  - Design solutions for identified problems
- Case studies
  - Start with examples, and maybe general principles will follow
- Ecosystem is important
  - Business environment, different stakeholders, process and goals of innovators
- Opportunity to contribute to building Development Engineering
  - Important to have good instructional resources and examples of different types of courses

Over to you Temina and Anustubh