

Development Engineering (DEV ENG)

DEV ENG C200 Design, Evaluate, and Scale Development Technologies 3 Units

Terms offered: Fall 2017, Fall 2016, Fall 2015

This required course for the Designated Emphasis in Development Engineering will include projects and case studies, many related to projects at UC Berkeley, such as those associated with the Development Impact Labs (DIL). Student teams will work with preliminary data to define the problem. They will then collect and analyze interview and survey data from potential users and begin to design a solution. Students will explore how to use novel monitoring technologies and “big data” for product improvement and evaluation. The student teams will use the case studies (with improvements based on user feedback and data analysis) to develop a plan for scaling and evaluation with a rigorous controlled trial.

Design, Evaluate, and Scale Development Technologies: Read More [\[+\]](#)

Objectives Outcomes

Course Objectives: Students will use multiple qualitative and quantitative methods to learn about user needs, to come up with new concepts and solutions, and to understand how new products and services achieve or fail to achieve their goals in a development setting.

Student Learning Outcomes: Students will be able to apply the skills to current challenges in development engineering

Students will develop a set of skills that will allow them to flourish in a climate of complex problem solving and design challenges in development engineering

Students will learn how to learn from users using qualitative and quantitative tools including surveys, interviews, new monitoring technologies, statistical analyses and experimental designs
Students will learn to participate in and lead innovation and creativity in collaborative settings

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Development Engineering/Graduate

Grading: Letter grade.

Instructors: Agogino, Levine

Also listed as: MEC ENG C200

Design, Evaluate, and Scale Development Technologies: Read Less [\[-\]](#)

DEV ENG 210 Development Engineering Research and Practice Seminar 2 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

Development Engineering represents a new interdisciplinary field that integrates engineering, economics, business, natural resource development and social sciences to develop, implement, and evaluate new technological interventions that address the needs of people living in poverty in developing regions and low-income areas of the United States. This seminar, offered each spring term, will focus on work-in-progress presentations by the students, as well as faculty and guest lecturers. This seminar is a required course for the Designated Emphasis in Development Engineering.

Development Engineering Research and Practice Seminar: Read More [\[+\]](#)

Objectives Outcomes

Course Objectives: The objective of the seminar is to prepare students for research and practice in development engineering. Students will give presentations on their research and receive feedback from faculty and peer students in multiple disciplines. The seminar will also provide a community of practice in the new field of development engineering.

Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Development Engineering/Graduate

Grading: Letter grade.

Instructors: Agogino, Brown

Development Engineering Research and Practice Seminar: Read Less [\[-\]](#)

DEV ENG 290 Advanced Special Topics in Development Engineering 1 - 3 Units

Terms offered: Spring 2016

This series covers current topics of research interest in development engineering. The course content may vary semester to semester. Check with the department for current term topics. All topics will address the development engineering goals of developing technology interventions designed to improve human and economic development within complex, low resource settings.

Advanced Special Topics in Development Engineering: [Read More \[+\]](#)

Objectives Outcomes

Course Objectives: To prepare students to understand critical topics associate with developing economics, development technologies and social impact.

Student Learning Outcomes: Varies with the topic. However, all spcial topics courses will teach students skills in integrating multiple disciplines of social sciences, economics, policy and technology into better understanding of development challenges and potential solutions.

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-3 hours of lecture per week

Additional Details

Subject/Course Level: Development Engineering/Graduate

Grading: Letter grade.

Advanced Special Topics in Development Engineering: [Read Less \[-\]](#)