

## **15.S02**

## Planning, policy, and technology for energy access in developing countries

E51-361, M (lecture) - W (lecture) - F (recitation) 2:30-4:00

Instructors: Prof. Ignacio J. Pérez-Arriaga & Dr. Robert Stoner

MIT Energy Initiative

**Teaching Assistant:** Yael Borofsky

**Units:** (3-0-9)

Prerequisites: None

This course is intended to introduce students to the complex challenges of providing universal energy access in developing countries. Students will learn about the technical, political, and social trade-offs inherent in designing energy solutions that can ensure universal access, particularly for very poor, sometimes remote communities.

We will discuss several aspects of energy poverty, including electrification, heating, and cooking and review the range of low-cost technologies being developed to meet these needs. Students will make extensive use of optimization models to plan on- and off-grid energy systems and learn how to use these models within the social, political, regulatory, and financial constraints that may not be easily modeled.

The knowledge acquired in this course will prepare students to meaningfully contribute to research, technology deployment, and policymaking focused on universal energy access worldwide as well as for future careers in industry, government, consulting, or multilateral development organizations.

There is no admissions cap on this course.

https://bit.ly/15\_S02