NUCLEAR INNOVATION BOOTCAMP

NUCLEAR UPENDED

Motivation: To spark innovation in nuclear energy we must teach students *how to innovate*.

2016 Pilot Program: From August 1-12, 2016 UC Berkeley will host a two week pilot program where 25 students will be trained in a variety of skills essential to innovation in nuclear energy while executing team design projects. The program will open with presentations by a variety of nuclear energy companies about what they see as the future potential of innovation in the nuclear industry. This opening context will inform and inspire the design projects participants complete during the program.

Sessions: Sessions will be led by experts from within and outside the nuclear industry to give students an understanding of nonspecific entrepreneurship, lessons to be learned from other industries, and considerations specific to nuclear. Topics will include:

- Opportunity recognition
- Idea development and execution
- Legal issues, intellectual property protection, and nuclear regulation
- Political landscape and global context
- Investor outreach and relationship cultivation
- Non-LWR technology
- Experiment design
- Cross-cutting technology needs

Approximately one half of time will be spent on the above content. The remaining time will be spent putting lessons to immediate use through team design projects.

Design Project: Based on information submitted before they arrive, students will be loosely distributed into groups of 5. Each group will have 4 members with differing technical expertise and a fifth member with a creative focus (journalism, graphic design, etc.). These groups will brainstorm and select an innovative project that they believe can address a problem in the nuclear industry. Over the two weeks, students will have access to mentors from all parts of the nuclear industry via email, phone, and Skype. They will also have opportunities to ask questions of the professors and experts who come in to lead sessions.

Students will have 2-3 hours built into the schedule each day for them to work on these projects; this time allocation will increase as we near the program's end. The closing session will be attended by company representatives, potential private investors, technical experts, relevant NGOs, and Department of Energy program managers. Groups will present their design projects and students will then have the opportunity to network with these industry members.