MICRO ENERGY INTERNATIONAL

ENERGY ENTREPRENEURSHIP IN DEVELOPING COUNTRIES
(EEDC)

Course Syllabus

OVERVIEW OF THE COURSE

The Inclusive Energy Entrepreneurship for Development (IEED) course aims at introducing students to how entrepreneurship can create positive impacts and value for low-income communities with clean energy technologies. The course is a learning platform for students with business and/or technical knowledge and interest to start energy-related businesses. It is about generating ideas, developing skills and learning tools to plan a viable business idea and to foster energy access in the Global South. During the program, the participants will have the opportunity to create their own draft of a business plan for energy supply based on adapted energy technologies.

Through this course, students can gain competence in analyzing and valuating markets, enterprises, technologies and financial tools in the renewable energy sector with the goal of developing new kinds of ecological businesses and social ventures. Students will learn to develop business plans and will additionally be qualified in project planning, market research and marketing.

The two core tracks, "Entrepreneurship" and "Energy in Developing Countries", will be offered providing a mix of theoretically oriented presentation, guest speakers and hands-on opportunities in assessing the potential of a business idea and develop the start of an entrepreneurial venture. Moreover, the students will be able to choose among some proposed elective sessions to complement the program.

CORE LEARNING OUTCOMES

At the end of the course, the participant will be able to:

- Understand of connection between energy access and economic development;
- Describe the energy ladder and the standard rural electrification approaches;
- Assess whether an idea is a good opportunity for entrepreneurial initiatives in developing countries;
- Learn from relevant examples of social entrepreneurs how to create value and develop innovative both technical solutions and business models;
- Put the customers at the centre of the business strategy by assessing their needs;
- Learn how to draft a valid business model and a sound business strategy;
- Build a successful team and cultivate ideas into a working plan for an entrepreneurial venture;
- Develop idea pitches and answer questions;
- Identify start-up funding sources.

Entrepreneurship
- Identifying Business Opportunities in Low Income Markets
- Business Model Canvas
- Identifying Business Model Constraints
- Business Plan Development
- Introduction to the Stakeholder Canvas and Stakeholder Management
- Value Proposition Canvas and Customer Centric Approach: Meeting Real Needs and Wants
- Market Research: Understanding Market Potentials and Limitations
- Business Idea Viability Assessment: How Can the Business Idea Mandala Help
- Selling and Marketing Energy Products for Low-Income Households
- Funding Opportunities for Businesses
- Pay-as-you-go Business Models
- End User Finance (MFIs, Saving Groups and Village Banks)
- Supply Chain Management and End of Product Life
- The Start-Up Experience
- Pitching Business Ideas

Energy in Developing Countries
- Traditional Approaches for Rural Electrification
- Innovative Approaches for Rural Electrification (Productive Use and SWARM electrification)
- Key Challenges and Success Factors for Rural Electrification
- Energy for Cooking in Developing Countries
- Productive Use of Energy (PUE) for Low Income Markets
- Linking Energy and Economic Development
- Introduction to the Energy Ladder Concept
- Water-Food-Energy NEXUS
- Needs and Demand Assessment for Renewable Energies in Low Income Markets
- Mini-grids – Technical and Financial Approach
- Energy Efficient Technologies for Low Income Markets
- Introduction to Energy Efficiency in the Housing Sector

Climate Change
- Sectorial Interventions for Climate Change Adaptation (Agricultural Value Chains, Manufacturing and Housing Sector)
- Existing Governmental Programs for Clean Energy Technologies
- Green Microfinance: Funding Opportunities for Green Businesses and End-Users

Motivation Letter and Training Needs Assessment

Draft Idea Pitch (5 mins)

Draft Business Inception Presentation (10-15 mins)

Business Inception Pitch (20 mins + 15 mins feedback) and Report (10 pages max. + Annex)