



Module 8: Water-Energy-Food nexus - Integrated energy approach

Theme	Subject	Hours	Teacher
Energy needs assessment	Analysis of available biomass for energy production	4	Fiala
	Socioeconomic assessment of energy needs	2	De Marinis
Renewable energy production techniques	Use of biomasses (thermochemical, fermentation)	4	Fiala e Tambone
	Use of other natural energy sources (eolic, solar-thermic, solar-electric, microh-hydraulics)	2	Fiala
	Organic waste valorisation (composting, anaerobic digestion): microbiological insights	2	Borin
	Energy for agriculture in Tanzania and Bolivia	2	Morganti
Analysis of possible interventions for energy production	Integrated evaluation of available energy resource for local needs	3	Fiala
	Masterplan for the implementation of an integrated and self-sufficient energy production/distribution system	3	Fiala
	Community Investment Strategy in Ghana	2	Provolo
	Appropriate technologies and green building in least developed countries	2	Franco / Masetto
Module conclusion	Evaluation and feed-back	2	
	Total Hours	28	
	Standard teaching	14	
	Seminar	6	
	Workshop	6	