

Water Energy Nexus

The water-energy nexus is the relationship between the water used for energy production, including both electricity and sources of fuel such as oil and natural gas, and the energy consumed to extract, purify, deliver, heat/cool, treat and dispose of water (and wastewater) sometimes referred to as the energy intensity (EI)

Period:	Period 2
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Educational management portal:	moodle.unitus.it
Objectives:	To analyse and to provide the students the instruments to understand the intimate connection between energy production/efficiency and water usage
Programme:	<ul style="list-style-type: none">● Connection between climate change, water, and energy.● Energy industry water requirements.● Energy sources and the urban water cycle.● Water footprint from of energy related activities.
Pre-requisites:	The course requires basic knowledge in: i) Thermodynamics fundamentals. ii) Energy conversion systems fundamentals; iii) Renewable energy fundamentals.
Study material:	<ul style="list-style-type: none">● Lecture slides;● Reading material;● Additional literature handed out during the course / made available via Moodle.