

INTRODUCTION TO RENEWABLE ENERGY DESALINATION	
Title	INTRODUCTION TO RENEWABLE ENERGY DESALINATION.
Subjects treated	This training action is the first online course focused on the topic "desalination by renewable energies". An introductory course is offered that summarizes the most relevant aspects of the main desalination technologies (including both membrane processes and thermal distillation processes) and the application of renewable energy technologies for their autonomous operation. Its application is directed, above all, to rural and isolated areas of developing countries where there is a shortage of water and the electrical network is weak or non-existent.
Estimated time of dedication	40 hours
Duration	2-29 November 2023; 4 weeks
Type of training	This course is developed through an on-line platform (Moodle), with interactive content and following a flexible methodology adapted to the student's time availability.
Addressed to	Technical staff of the Public Administration, professors, technicians of the water or energy sectors.
	The course "INTRODUCTION TO RENEWABLE ENERGY DESALINATION " is organised into 9 units: 1. Basic concepts on Desalination and Renewable Energies. 2. Desalination I Membrane desalination processes (EDR, RO). 2a. Energy Recovery in Reverse Osmosis Desalination. 2b. Last generation RO membranes. 3. Desalination II. Distillation processes (MED, MSF, H/D, MD). 4. Solar thermal energy and MED. 5. Solar thermal energy and H/D or MD (small capacity systems). 6. Solar photovoltaic energy powered RO systems. 7. Wind energy powered RO systems. 8. Other technologies. 9. Non-technical aspects.
Responsible entity	<i>Instituto Tecnológico de Canarias (ITC)</i>
Nº of students registered to launch the course	<i>Mín. 10</i> <i>Máx. 30</i>