

Worldwide list of ecosan courses by various institutions

Includes stand-alone ecosan courses or ecosan modules which are part of university degrees.

Compiled by GTZ ecosan team, grouped by regions and countries

Note: If you would like to add your own courses or spot any errors or omissions, please contact us (email: ecosan@gtz.de).

	Region/ Country	Name of Institution	Course or degree name	Stand- alone course	Course is part of degree	Course duration	Frequency and start date	Brief description of the course	Target group and objectives	Website	Contact
Africa											
1	Burkina Faso	International Institute for Water and Environmental Engineering (2iE)	Approach for domestic wastewater treatment and reuse by ecosan system		X	One week		Classroom course or Seminar, Film, Field trips	Postgraduate students in Sanitary and Environment	http://www.2ie-edu.org/spip.php?article3454	joseph.wethe@2ie-edu.org OR denis.zoungrana@2ie-edu.org
2	Burkina Faso	International Institute for Water and Environmental Engineering (2iE)	Design and management of ecosan		X	One week		Classroom course or Seminar (technologies for design; management), Film, Field trips	Students pursuing the Masters of Engineering on Water and Environnement	http://www.2ie-edu.org/spip.php?article3454	joseph.wethe@2ie-edu.org OR denis.zoungrana@2ie-edu.org
3	Burkina Faso	Centre Régional pour l'Eau Potable et l'Assainissement à faible coût (CREPA)	<i>In French:</i> Ecosan; Gestion intégrée des eaux usées et excréta dans le contexte africain et options de traitement et de valorisation (GIEUE /OTV.)	x		10 days	July each year	<i>In French:</i> Objectifs Renforcer les capacités de mise en œuvre et de gestion des ouvrages d'assainissement à travers l'acquisition d'informations et connaissances sur les nouveaux concepts de gestion intégrée des eaux usées et excréta et les options de valorisation et de traitement, afin de réduire les risques sanitaires et environnementaux, améliorer l'état nutritionnel et protéger les ressources naturelles au bénéfice des populations en milieu urbain, semi-urbain et rural.	Experts en Afrique	http://www.reseaucrepa.org/page/1819	CREPA Siège, 03 BP 7112 Ouagadougou, Burkina Faso, Tel : +226 50 36 62 10/11, Fax : +226 50 36 62 08
4	Kenya	Netwas International	Sustaining WASH in Schools and in Communities: promoting sustainable approaches		x	11 days	annually	The course on "Sustaining WASH in Schools and in Communities: promoting sustainable approaches", will enhance awareness on how to create more effective WASH Programmes. Focus will be on creating conducive learning environment as well as planning and implementing improvements in Schools and communities. The course also seeks to bring about the new awareness of the complex interaction between behavioral and technological elements in schools and communities.	Managers and staff in development work, Leaders and managers of community based organizations, NGOs, government and donor agencies	http://www.netwas.org/index.php/Training/Sustaining-Water-Sanitation-and-Hygiene-WASH-in-Schools-and-in-Communities-promoting-sustainable.html	Course Coordinator NETWAS International, Magadi Road, Off Langata Road, P.O. Box 15614-00503 Mbagathi, Nairobi, Kenya. Tel: +254-20-890555/6/9/60, Cellphone: +254-727 170476, Fax: +254-20-890553/54, E-mail: training@netwas.org
5	Uganda	Makerere University Department of Civil Engineering	Public Health Engineering		x	4 lectures	annually	Ecosan is taught within the course of public health engineering	Third year civil engineering students	http://tech.mak.ac.ug/Civil/civil.htm	cniwagaba@tech.mak.ac.ug
6	Uganda	Makerere University Department of Civil Engineering	Master of Integrated Sanitation Management	x		2 years	projected 2010	The students learn the interactions of water supply, sanitation and waste water treatment, and create awareness for the water quality, healthy environment and economic impacts.	Postgraduate students	http://tech.mak.ac.ug/Civil/civil.htm	cniwagaba@tech.mak.ac.ug
Asia and Pacific											
7	China	University of Science and Technology Beijing	MSc in Environmental Engineering (course in Chinese)		X	2 years	annually	Curriculum and course on ecosan integrated in university degree.	Postgraduate students	http://en.ustb.edu.cn/	int_office@ustb.edu.cn Prof. Dr. Zifu Li, zifuli@ces.ustb.edu.cn
8	China	Tsinghua University	MSc in Civil Engineering and Water resources Management (course in Chinese)		X	2 years	annually	Curriculum and course on ecosan integrated in university degree.	Postgraduate students	http://www.civil.tsinghua.edu.cn/en_index.htm	Prof.Chengwen Wang, wangcw@mail.tsinghua.edu.cn
9	China	Beijing University of Civil Engineering and Architecture	MSc in Civil and Sanitary Environmental Engineering (course in Chinese)		X	2 years	annually	Curriculum and course on ecosan integrated in university degree.	Postgraduate students	http://www.bicea.edu.cn/infoview.jsp?articleID=1195	Prof. Xiaodi Hao, haoxiaodi@bucea.edu.cn

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10	China	Xi'an University of Architecture & Technology	Design of Sustainable Sanitation (course in Chinese)		X	2 years	annually	This course explains sustainable sanitation solutions for developing, but also for rich countries. Research on thematic areas such as toilet design and architecture is conducted. Technical options for toilet design aimed at topics such as cost-effective and safe collection of human excreta are taught.	University students	http://www.xauat.edu.cn/jdeg/academics.html	Prof. Xiaochang Wang, xcwang@xauat.edu.cn
11	China	Guangxi Medical University	Public Health Engineering (course in Chinese)		X	2 years	annually	Curriculum and course on ecosan integrated in university degree.	University students	http://www.at0086.com/gxmu/	Prof. Xianghong Li
12	China	Hohei University	Environmental Engineering (course in Chinese)		X	2 years	annually	Curriculum and course on ecosan integrated in university degree.	University students	http://en.hhu.edu.cn/	Prof. Dr. Jiashun Cao
13	India	Anil Agarwal Green College: Centre for Science and Environment (CSE) (NGO)	Domestic Wastewater Treatment and Reuse	X		5 days	each semester	Through hands-on workshops, interactive seminars, detailed case studies, film shows, field trips, and classroom instructions, the programme will explore the current water-waste situation, pollution management practices and policies and their drawbacks.	Engineers, architects and builders	http://www.cseindia.org/aagc/citywater-workshop.asp	rksri@cseindia.org
14	India	Ecosan service foundation (NGO)	Ecosan Expert Courses	X		two weeks extensive course	usually every 3 months and on request for groups	Training includes lectures given by international ecosan experts, group work, role plays, case studies and a field trip to Ecosan Projects in Maharashtra.	Sanitation engineers, scientists, environmentalists, social workers, chemists, biologists, members of municipalities, water supply and sewerage boards, pollution control boards, representatives of other government agencies and NGOs as well as manufactures, consultants, students etc.	http://www.ecosanservices.org	ecosanindia@gmail.com
15	India	WASH Institute	Ecological Sanitation -Short term Course	x		Three days minimum	Course is conducted anytime during the year as per requests	The course is a residential one and includes theory on basic concepts of ecological sanitation and the difficulties of the existing sanitation options. Basic concepts on integrated water sanitation and hygiene are also covered. The practical aspects of the training include the construction steps in eco-san toilets also shown by audio visual aids besides a field visit to see the models in use. Examples of various models of eco-san in various countries are shown as audio visuals. The use of human excreta and urine in crop production is also covered. A pool of experienced resource persons in the field also deliver lectures and narrate their experiences. The third day includes field visit to see the models of eco-san toilets and also waste management. At the end of course a certificate is awarded to the participant besides many materials given include a guide book on eco-san, fact sheets, and the whole course material on CD.	Courses are tailored to suit various levels or groups such as personnel of INGOs, NGOs, government officials, staff of organizations and field workers engaged in water sanitation, individuals or students who are interested in learning about ecological sanitation	http://washinstitute.net/	secretariat@washinstitute.org
16	Nepal	Tribhuvan University, Institute of Engineering	MSc in Sustainable Water and Sanitation, Health and Development		X	2 years	September, annually	This is a two year study programme run in collaboration with the Norwegian University of Life Sciences and COMSATS Institute of Information Technology (CIIT), Pakistan. By giving comprehensive competence in water supply and sanitary engineering and associated health issues, the programme builds the required capacity to tailor solutions to local needs related to the UN Millennium Goals for water and sanitation.	This course is designed for graduates of natural sciences, social sciences, engineering and related discipline who intend to pursue careers in sustainable sanitation.	http://www.ioe.edu.np	isbiroraeebi@yahoo.com (Iswor Amatya)
17	Pakistan	COMSATS Institute of Information Technology, Abbottabad	MSc in Sustainable Water and Sanitation, Health and Development		X	2 years	August, annually	This is a two year study programme run in collaboration with the Norwegian University of Life Sciences and Tribhuvan University, IOE, Nepal. By giving comprehensive competence in water supply and sanitary engineering and associated health issues, the program builds the required capacity to tailor solutions to local needs related to the UN Millennium Goals for water and sanitation.	This course is designed for graduates of natural sciences, social sciences, engineering and related discipline who intend to pursue careers in sustainable sanitation.	http://www.ciit-att.edu.pk	bhadar.nawab@yahoo.com (Bahadar Nawab)
18	Philippines	Xavier University (collaboration of several departments: XU School of Medicine, PUVeP, XU Engineering Resource Centre, XU Governance and Leadership Institute)	Ecological Sanitation Course	X		1-4 days	each semester and on request	Xavier University offers training and short courses in ecological sanitation at local government and grassroots level. Xavier University promotes ecological sanitation systems by integration into city planning and relevant academic curricula, research and social outreach programs of the university.	Local government officials, public health workers, civil society groups, academe, individuals working and interested in health & sanitation	http://puvep.xu.edu.ph/ecosan.htm	puvep@xu.edu.ph, gsijuly18@yahoo.com, robert.gensch@cimonline.com (Gina Ichtón, Robert Gensch)
19	Philippines	Xavier University Jose P. Rizal School of Medicine	MD - ?		x	Unknown (lectures in course)	each semester	Ecosan and sustainable sanitation are an integrated part of the curriculum. Additional research on health related aspects (safety of drinking water, groundwater research and safe reuse of urine & faeces in agriculture).	XU School of Medicine Students	Note: further investigations about this course are ongoing	gsijuly18@yahoo.com, robert.gensch@cimonline.com (Gina Ichtón, Robert Gensch)

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20	Singapore	College of the World Toilet Organization	Sustainable Sanitation Course	X		3-10 days	each semester	This course equips participants with the knowledge to design and maintain toilets that are economically feasible, culturally and socially acceptable and environmentally friendly. WTC currently provides in-house and on-site training in toilet design and maintenance, disaster and emergency sanitation, and sustainable sanitation solutions including ecological sanitation.	Sanitation engineers, civil engineers, architects, environmental managers, decision and policy makers, volunteers and those who are interested in ecological sanitation.	http://www.worldtoilet.org/our-work.asp	info@worldtoilet.org
Europe, Caucasus and Central Asia											
21	Finland	Tampere University of Technology, Laboratory of Environmental Engineering and Biotechnology	Safe and Sustainable Sanitation (SSS)		X	8 weeks	August 31, 2009. Arranged every autumn.	Safe and sustainable sanitation (SSS) internet course is based on lectures given by international experts during the 3rd International Dry Toilet Conference Workshop, Tampere University of Technology, August 10-12, 2009. The aim of the course is to familiarise students to different methods of urine and excreta reuse, the evaluation, selection and implementation of techniques and risk control actions related to the reuse. Safety, technical feasibility, socio-economic aspects and ecological sustainability of alternative, non-traditional sanitation are also covered.	Advanced MSc students, PhD students and post docs from Finnish and international universities and non-academic sanitation professionals.	http://www.tut.fi/public/oppaat/opas2009-2010/perus/laitokset/Kemia_ja_bioteknikka/BIO-4356.html	johannes.penttinen@tut.fi
22	Germany	Technical University (TU) Berlin	Siedlungswasserwirtschaft (course in German)		X	Unknown (lectures in course)	annually	MSc in Civil Engineering and Technical Environmental Protection Engineering. Sanitary engineering as a traditional part of the civil engineering deals with the water cycle and the corresponding material flows in populated areas. Ecosan is integrated in the lectures of sanitary engineering.	Civil engineers and environmental protection engineers.	http://www.siwawi.tu-berlin.de/	pressestelle@tu-berlin.de
23	Germany	TU Dresden Centre for international studies of environmental management - CIPSEM	Integrated Water Management	X		4 weeks or 6 months	annually	IWM is either offered as a stand alone course, or as a module within the 6-month course, both part of the UNEP/UNESCO/BMU postgraduate study programme "Environmental Management for Developing Countries" at TU Dresden; Other modules are: biodiversity and nature protection, solid waste management and cleaner production, energy efficiency and renewable sources, land-use and impact assessment, governance and sustainable development.	Professionals from developing and emerging countries, mainly governmental and administrative staff, as well as professionals from NGOs and multipliers at Universities	http://tu-dresden.de/cipsem	rolf.baur@tu-dresden.de (Rolf Baur)
24	Germany	Technical University of Hamburg-Harburg	MSc Wasser- und Umweltingenieurwesen (course in German)		X	2 years	every six month	Ongoing master program with ecosan integrated into the courses and lectures. Major fields of study are urban water management, material flow and energy management, environmental and water management and urban infrastructure planning.	University students	http://www.tu-harburg.de/studium/programm_e/master/wau.html	studienberatung@tuhh.de
25	Germany	Technical University of Hamburg-Harburg	MSc Environmental Engineering (courses in English)		X	2 years	winter term	Ongoing international master program with some ecosan content integrated into the courses and lectures. Major fields of study are urban water management, material flow and energy management, environmental and water management; Ecosan-course: Resources oriented Sanitation: Principles, Practice and Implementation of High- and Low-Tech Options	University students	http://www.tu-harburg.de/education/master/environmental_engineering/course.html	study@tuhh.de
26	Germany	University of Weimar in cooperation with the University of Hannover	MSc Wasser und Umwelt - neuartige Sanitärsysteme (course in German)		X	8 lessons per week	every six month	MSc Water and Environment (distance studies) in cooperation with DWA, DVWG and online course on NASS (including ecosan). There is a correspondence course with options in wastewater management, hydraulic engineering, water supply and waste management. It is offered in collaboration with the University of Hannover, whose courses are integrated into the overall course structure. An online multi-media course is also available	This course is not only designed for graduates of technical colleges and universities, but also for non-graduates working or intending to work as experts in the field of water and the environment sector.	http://www.uni-weimar.de/Bauing/wbbau/studium/index.html	elke.lindner@bauing.uni-weimar.de
27	Norway	Norwegian University of Life Sciences	MSc Sustainable Water and Sanitation, Health and Development		X	2 years	autumn Semester (Oct.)	By giving comprehensive competence in water supply and sanitary engineering, and associated health issues, this programme builds the required capacity to tailor solutions to local needs related to the UN Millennium Goals for water and sanitation.	This course is designed for graduates of natural sciences, social sciences, engineering and related discipline who intend to pursue careers in sustainable sanitation.	http://www.umb.no/ecosan/article/sustainable-sanitation-decentralized-natural-and-ecological-wastewater-treatment	sit@umb.no
28	Norway	Norwegian University of Life Sciences	Sustainable Sanitation - Decentralised, Natural and Ecological Wastewater Treatment	X		4 weeks	June, each year	This course explores sustainable sanitation solutions for developing, but also for rich countries. The different systems are introduced through case studies presented by international experts. Through inductive learning based on real cases from different parts of the world, including sanitation in crisis situations, dry, wet and cold climates, the students are challenged to suggest and design systems.	This course is designed for graduates of natural sciences, social sciences, engineering and related discipline who intend to pursue careers in sustainable sanitation.	http://www.umb.no/ecosan/article/sustainable-sanitation-decentralized-natural-and-ecological-wastewater-treatment	sit@umb.no

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29	Sweden	Sida/EcosanRes (research programme)	Advanced International Training Programme (ITP) in Ecological Sanitation	X		5 weeks	annually	Annual course for professionals in two regions alternating between Latin American countries, Africa and Asia. The programme focuses on attractive sanitation solutions for urban and peri-urban areas to promote human health, enhance human dignity, improve nutritional status and protect water sources.	Professionals in selected countries in Asia, Africa and EECCA engaged in town planning, water supply, waste management, hygiene, and socio-economic development, researchers and teachers/ trainers in fields related to sustainable sanitation, and key persons engaged in NGOs.	http://www.ecosanres.org/ITP2008.htm	madeleine.fogde@sei.se
30	Switzerland	Berne University of Applied Sciences	CAS - Integrated Water Resource Management in the context of Developing and Transition Countries		X	300 hours within 1.5 years	each August	Participants will be trained to consider water-related problems from an integrated and global point of view, derive and discuss possible solutions and propose potential activities in a local context. They will improve their management and monitoring skills with regard to water projects in Developing and Transition Countries.	Civil engineers, agricultural engineers, environmental engineers, architects, managers of governmental organisations, NGO involved in IWRM programmes	http://www.ahb.bfh.ch/ahb/en/Weiterbildung/cas/CAS_IWRM_Detail.htm	wb.ahb@bfh.ch
31	Switzerland and India	Swiss Agency for Development and Cooperation, The Network University and International Ecological Engineering Society in Switzerland / Ecosan Service Foundation in India	Ecosan E-learning course	X		usually one week	once a year	Free online courses on ecosan, a library on website and discussion and communication platform / short courses in sustainable environmental technology and ecological engineering.	Practitioners working on sustainable environmental technology and ecological engineering.	http://www.mynetworks.org/tcb/index.php?id=1	info@mynetworks.org
32	The Netherlands	UNESCO-IHE, Institute for Water Education, Delft	MSc in Municipal Water and Infrastructure		X	40 hours per week; 18 months	annually in October	MSc in Municipal Water and Infrastructure where ecosan is integrated in the lectures on water management.	The Masters Programme educates professionals in the fields of water supply, sanitation and integrated urban engineering, particularly in urban areas.	http://www.unesco-ihe.org/Education/MSc-Programmes/MSc-in-Municipal-Water-and-Infrastructure	info@unesco-ihe.org
33	The Netherlands	UNESCO-IHE, Institute for Water Education, Delft	Ecological Sanitation Online Course	X		18 weeks	every six month	This course deals with options for sustainable sanitation in low-income countries, which will contribute to achieving the Millennium Development Goals (MDGs) for sanitation and related fields such as reducing poverty, hunger and child mortality, improving lives of slum dwellers and ensuring environmental sustainability.	The course is designed for mid-career professionals who work in low-income or transition countries and deal with planning, promoting, designing, operating or managing sanitation systems for residents in urban, peri-urban, slum or rural areas.	http://www.unesco-ihe.org/Education/Short-courses/Online-courses	info@unesco-ihe.org
Latin America and Caribbean											
34	Peru	UNALM (Universidad Nacional de La Molina)	Ecological Sanitation Course - Basics (in Spanish)	X		24 hours	annually	Annual basic ecosan course, which looks at sanitation, climate change and MDGs, ecosan, water saving and water regenerating technologies. Presentation of economic sanitation technologies to closing the loop: Constructed Wetland, UDDT, Compost and Anaerobic Digestion. Projects, application and operation models, national and international experiences are shown.	Peruvian professionals and students	http://www.lamolina.edu.pe/proyeccion/registro_eventos/Eventos_Registradoslist.asp?search=ecosan AND http://www.redsaneamientoostenible.org.pe/index.php?option=com_content&view=article&id=13&Itemid=88	rmiglio@lamolina.edu.pe (Rosa Maria Miglio Toledo De Rodriguez)
35	Peru	UNALM (Universidad Nacional de La Molina)	Advanced Ecological Sanitation Course (in Spanish)	X		192 hours	March 2010	Advanced ecosan Course (Diplomado): MDGs, climate change and consequences for sanitation, ecosan and effluent separation, design of constructed wetland, UDDT, compost and anaerobic digestion, waste separation, application of ecosan components in conventional wastewater treatment plants, reuse of treated effluents biogas and sludge, urban agriculture, water saving and water regenerating technologies.	Professionals in Latin America	http://www.redsaneamientoostenible.org.pe/index.php?option=com_content&view=article&id=13&Itemid=88	rmiglio@lamolina.edu.pe (Rosa Maria Miglio Toledo De Rodriguez)
North America											
36	United State of America	ESWStanford, Stanford University	Spring 2009 Course: Sustainable Sanitation Systems in Mexico		yes		annually	Project-Based course on ecological sanitation	Engineering students	http://www.stanford.edu/group/esw/wiki/Spring_2009_Course:_Tsunami-Safe_Design_and_Ecological_Sanitation	