General Information	
Academic subject	Industrial Ecology
Degree course	Bachelor's in Economics
Curriculum	
ECTS credits	6
Compulsory attendance	No
Language	Italian language For Erasmus Students, it is possible to study on English textbooks and additional learning material. The exam can be sustained in English.

Subject teacher	Name Surname	Mail address	SSD
	Vera Amicarelli	vera.amicarelli@uniba.it	SECS-P/13

ECTS credits details			
Basic teaching activities			

Class schedule	
Period	I semester
Year	III
Type of class	Online course. Team access code: **d95wftn** Lecture / Seminars / Case studies / Class presentations

Time management	
Hours	42
Hours of lectures	
Tutorials and lab	

Academic calendar	
Class begins	September 27, 2021
Class ends	Dicember 17, 2021

Syllabus	
Prerequisites/requirements	Prerequisites with General Accounting SECS-P/07
Expected learning outcomes	*Knowledge and understanding* The course aims to provide adequate knowledge and understanding at Economic and Commerce first level degree, focusing the mechanisms and interactions between the economic system and the natural system allowing us to identify the most efficient solutions to their management. *Applying knowledge and understanding* The transfer of Industrial Ecology knowledge has to be oriented to the future professional approach to work, providing appropriate skills able to be used to plan and sustain arguments and solving problems related to the mechanisms and interactions between the economic system and the natural system, identifying the most efficient solutions to their management. *Making informed judgements and choices* Students will gain adequate capacity to collect and interpret information and data necessary and useful to organize proper and independent assessments on issues concerning the

	mechanisms and interactions between the economic system and the natural system, and the identification of the most efficient solutions to their management. *Communicating knowledge and understanding* The development of adequate capacity to communicate information and ideas as well as suitable problem-solving skills will be supported by the instrument of the interactive lesson and the organization of project work whose themes and methods of execution will be define time by time. *Capacities to continue learning* Frontal and interactive lessons, workshops and project work together with home study will contribute to the development and improvement student capacity of learning with a high degree of autonomy.
Contents	Industrial Ecology definition. Evolution of Industrial Ecology concept. Industrial Ecology principles and basic concepts. Applying Industrial Ecology principles: - Industrial ecosystems and eco-industrial parks; - Improvement of metabolic fluxes of industrial processes and materials and energy use. Methods and tools of Industrial Ecology such as: Input-Output Analysis (IOA); Material Flow Analysis (MFA); Substance Flow Analysis (SFA); Water and Carbon footprint.
Course program	
Bibliography	Study material is available at the DEMDI Commodity Science Library (I floor).
Notes	
Teaching methods	Lecture, exercises, project work and class presentation
Assessment methods	Oral
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are.	The student must show: - Adequate knowledge related to various fields of eco-efficiency proposing managerial, technical and economic options useful to the reduction of environmental impacts related to economic activities; - Sufficient capacity for critical analysis and problem solving applied on different issues discussed; - Sufficient exposure capabilities of their own ideas and acquired skills.
Further information	