



TICHE Academy: Partners resources mapping

Leading organization	Name of the initiative/course/training	Area of content	Objective	Target	Language of delivery	Time frame of the implementation	Modules	Duration	Mode of delivery	Didactic Methodology	Evaluation Methods	Certification	Funded/ Marketed	Link to training programme or relevant document
IRFEDD	Motion IRFEDD - Des métiers pour l'environnement (S-F)		illustrate the definitions, issues, sectors and professions of the green economy and the circular economy.	All publics	French	2018	1 vidéo	2:47mn	Online	motion design	none	none	IRFEDD & FEDEREC	https://vimeo.com/310439072/1302680f89
IRFEDD	Fiche interactive économie verte		Information on jobs, professions and training of the green economy in the Provence-Alpes-Côte d'Azur region for guidance and integration professionals	All publics	French	2014	1 PDF report		Online		none	none	Realized in partnership with ADEME, PACA Region	https://irfedd.fr/wp-content/uploads/2016/09/Fiches-interactives-economie-verte-irfedd.pdf
IRFEDD	Module on Introduction to Sustainable Development		Giving a general knowledge on Sustainable Development, Circular Economy and CSR	University students	French	Each year	5 times 0.5 days	17.5h	Presential	Videos, questionnaires, working groups, theoretical approach	Quiz, individual & collective exercises, collective case study	integrated into the general cursus	Service provided for University of Aix-en-Provence	
IRFEDD	Cahiers du Conseil de l'orientation	Eco innovation	Thématique oriented reports & analysis on skills, training and issues evolution	All publics	French	2013 - 2018			Online	Report, figures, analysis	none	none	Was financed by PACA Region	https://irfedd.fr/les-cahiers-orientation/
AUEB	Master's Programme in Law and Economics in Energy Markets	Law	The topic in Law and Economics in Energy markets has as its object the scientific training and the application of students' knowledge and skills in current economic, political and legal issues that characterize the modern energy markets in the	Students	Greek	2020-today	10 courses	12 or 24 months	Blended	Presentations, small projects	Final Exams	Masters of Science	Academic Excellence sponsored by ATTIKI NATURAL GAS DISTRIBUTION	https://www.dept.aueb.gr/en/lawecon
AUEB	Professional Seminar on Sustainability Transition		In collaboration with the International Network of Solutions for the Sustainable Development of the United Nations, the Training and Lifelong Learning Center of the Athens University of Economics and Business. Brook Knowledge as the Scientific	All publics	Greek	2020-today	12	36h	Online	Presentations, small projects	Final Exam or Dissertation	Certificate of Vocational Education and Training	In collaboration with the International Network of Solutions for the Sustainable Development of the	https://diavou.aueb.gr/programs/101-programs-dia-zwisis/1698-efarmozontas-tin-aeiforki-metavasi-i-atzenta-2030-i-symfonia-ton-parision-gia-tin-klimatiki-allagi-kai-i-evropaiki-praxi-symfonia-1000000/
University of Oulu	Product data and product life cycle management	Industrial engineering and management	The course familiarises students with the broad concepts of product data management (PDM) and product life cycle management (PLM). Upon completion of the course, the student will be able to: - understand the basic terminology related to product, productisation, PDM and PLM - analyse the current status of the productisation, product data structures, product life cycle management, commercial and technical product portfolios and related applications in case companies - create strategic PDM and PLM concept based on the critical building blocks for one product data, product master data and product related business data - model the company's HW, SW and Service product related commercial and technical product portfolios according to productisation concept - understand the PDM and PLM processes including key roles such as concept owners, education and support roles, data owners, data users including the product data quality concept - create and implement the governance model for PDM and PLM process and IT development as a part of company's business process development including PDM/PLM related information	Industrial Engineering and Management students of UniOulu.	English				Contact teaching	The tuition will be implemented as face-to-face teaching, course readings and by a practical assignment which is a common with a course 5553465 Product portfolio management. Face-to-face teaching 20 h (lectures), practical assignment (group work) and self-study 114 h. Lecture materials and selected articles.	Group work report (50 % of the grade) and exam (50 % of the grade).			
University of Oulu	Sustainable development and corporate social responsibility	Industrial engineering and management	Upon completion of the course, the student will be able to: - describe essential concepts related to sustainable organisations and corporate social responsibility - identify development trends that may have an impact on organisations' performance - define and apply the principles of corporate social responsibility and social sustainability and their impacts at different levels - identify and analyse different challenges organisations may confront related to sustainable development - apply development measures for the challenges	Industrial Engineering and Management students of UniOulu.	Finnish. Supplementary material in English				Contact teaching	Weekly assignments and group work. Lectures 18h, group work 60h and independent studying and weekly assignments 56h	Weekly assignments and group work			

University of Oulu	Global Economics	Economics and business administration	After passing the course the student is capable to explain the impact of international trade on the economy. In addition, the student can compare different instruments of trade policy and their welfare effects. The student also understands basic functioning of foreign exchange markets.	Degree Programme in Economics and Business Administration	English			Contact teaching	Face-to-face teaching. 36 hours of lectures (including exercises) and 93 hours of independent study of the textbook. Mid-term exams or final exam.	During the course there are two mid-term exams. The average of the mid-term exams determines the overall grade of the course. The mid-term exams can be replaced by a final exam.			
University of Oulu	Introduction to Environmental Philosophy (OPEN UNI)	Environmental philosophy	After completing the course, students will understand the central features of the fundamental problems and approaches in environmental philosophy.	Open university	Finnish			Contact teaching	Contact teaching and/or independent study Lecture course and/or book exam	Formal lecture exam and/or book exam or other method agreed upon with the person responsible			
University of Oulu	Humans and the Environment (OPEN UNI)	Cultural Anthropology, Archaeology	Students will be able to define the relationship between protecting cultural heritage and protecting the environment. Students will also be able explain the fundamentals of the interaction between people and the environment, as well as the fundamentals of the concept of nature from a chronological perspective. Students will be able to discuss how specific cultures have adapted to their environments. Students will also be able to define human being's relation to animals and to their immediate environment. In addition, students will be able to define the cultural factors that control these relations. Students will also be able to discuss contemporary environmental questions and their effects on local communities.	Open university	Finnish			Contact teaching	Contact teaching Lectures, written assignments or exercises	Assignments on lectures and formal lecture examination or written assignments or exercises			
University of Oulu	Sociological environment research (OPEN UNI)	Sociology	Having completed the course, the student - has familiarized her/himself with important current studies in sociological environmental research. - can describe the main concepts, theoretical tradition and current research in this field. - knows how to use this knowledge in research and practical working duties and how to take part in societal discussion on the theme.	Open university, Students pursuing Basic Studies in Sociology	Finnish (can be replaced with English literature)			Independent work	Independent studying E-exam or an essay (15 pages) Compensatory lectures if possible.				
University of Oulu	Changing World - Sociological approaches (OPEN UNI)	Sociology	The student has familiarised her/himself with important current research on globalisation. Having completed the course, the student has a mastery of the main concepts, the theoretical tradition and current research on this area. The student knows how to use this knowledge in research and practical working duties and how to take part in societal discussion on relevant topics.	Open university, Students pursuing Basic Studies in Sociology	Finnish (may be substituted by English literature)			Contact teaching	Face-to-face teaching Book exam, substitutive lectures as far as possible	Book exam, substitutive lectures as far as possible			
University of Oulu	Geographies of global development	Global development	This course gives knowledge of global development problems from geographical point of view. After the course the student can explain what development indicates and what kind of social and economic phenomena will explain both development and under development. He/she is also able to compare different actions that are aimed to diminish the uneven development based on different theories and strategies.	Geography students, especially teachers. Students minoring in Geography and Basic Studies in Environmental Conservation. Geography exchange students.	Finnish or English			Independent work	Book exam (no face to face teaching). Book exam.	Exam on examinarium.			
University of Oulu	Global Public Health (OPEN UNI)	Health	This course introduces the multidisciplinary field of public health in a global context. • This course will give an overview of the economic, social, environmental and cultural contexts of public health which are intrinsically connected. After the course students will understand how global public health can be improved through prevention and health promotion for achieving a sustainable development in health	Open university	English			Independent work	The course will be arranged utilizing activating teaching methods in Moodle learning environment. Course consists of 54 hours of studies independently.	The course is taught online through Moodle learning environment where student will have different assignments and lectures.			

University of Oulu	Waste management and recycling	Waste	After completing the course, the student will be familiar with the main features and objectives of waste legislation, and other policy instruments used in waste management. The student knows the key concepts of waste management and can use the waste-related terminology correctly. The student also understands the roles and responsibilities of stakeholders and different actors in the municipal waste management system. The student knows main waste minimization and recycling requirements and is also familiar with the separate collection requirements at source. The student can plan municipal waste collection system for households and is able to calculate the recycling and recovery rates of recyclables. The student knows the key recycling technologies for the main waste fractions and can calculate treatment costs for the major streams.	Bachelor's students of Environmental Engineering; Bachelor's students of Civil Engineering; Master's students of Process and Environmental Engineering; Sustainable Development minor students; Climate Change and Northern Sustainability minor students; Other minor subject students.	English			Online	Distance learning Lectures, lecture assignments and an exercise in Zoom and Moodle. Online and video lectures; lecture assignments and an exercise as a personal work.	Continuous evaluation. Completion of all personal lecture assignments and the exercise as a personal work during the course period are mandatory, no exam.			
University of Oulu	Environmental Chemistry	Environmental chemistry	Upon completion the student should have acquired an understanding of chemistry of atmosphere, hydrosphere and terrestrial environment. The student should have understanding of twelve principles of green chemistry. After the course the student is acquainted with the limitations of the use of dangerous chemicals and is able to find updated information of them.	Students of UniOulu	Finnish, in English as a book examination			Blended	Blended teaching Book examination 134 h of studying	Book examination			
University of Oulu	Circular economy in metallurgy	Process engineering	Student can identify and describe the characteristic features of the most relevant metallurgical residues. Additionally, they can estimate what kind of properties are needed when metallurgical residues are used in different applications (e.g. recovery of valuable elements, recycling, valorisation, safe landfilling) and what kind of processes and treatments are needed to obtain these properties. Finally, they can estimate possibilities to use secondary raw materials in metal production.	Students of process metallurgy.	Finnish			Contact teaching / online	Classroom education and/or remote education	Continuous assessment consisting of exercises that are made during the course.			
University of Oulu	Inorganic Materials in Circular Economy	Process engineering	Upon completion of the course, a student explains the main incentives, possibilities, challenges and barriers behind the utilization of high-volume industrial residues. Student is familiarized with environmental and legislative aspects related to utilization of industrial residues. The student can plan new business while taking the limitations set by the environmental and legislative aspects and the industrial residue into account.	Master's Programme in Process Engineering	English					Group work and final seminar.			
University of Oulu	Research training of bio and circular economy	Circular economy, process engineering	Upon completion of the course, a student knows how to do experimental laboratory work and report the results of the experimental research work.	Master's Programme in Process Engineering	Finnish, English			Contact teaching / online	Face-to-face teaching. Literature review about 15 hours. Experimental study in laboratory about 80 hours. Reporting about 40 hours.				
University of Oulu	Environmental science and technology	Environmental engineering	Knowledge on: state of the environment, pollution, contamination, essential global and regional environmental problems and their relations etc.	Bachelor's degree students of Environmental engineering, students of the Sustainable Development Minor, other minor students.	Finnish			Contact teaching	Contact teaching 20 h, learning tasks 30 h, group work 30 h, independent studying 55 h.	Tasks, group work and exam are evaluated.			
University of Oulu	Environmental engineering in industry and municipalities	Environmental engineering	The student is able to define different methods and techniques to control and reduce environmental loads from industrial and municipality sectors. He/she is able to explain main specific characters, challenges and driving forces in the field. The student can describe the environmental impacts on air, water and soil, and methods and technological solutions to reduce these.	Bachelor's degree students of Process and Environmental Engineering study programmes.	Finnish			Contact teaching	Contact lectures, group works, report Lectures 24h, group work 8h, self studies 103 h	Written mid-exams and a group work report.			

University of Oulu	Environmental Impact Assessment	Environmental engineering	The student will acquire a broad and multidisciplinary and sustainable approach to environmental impact assessment (EIA). The student will know the all steps in EIA process and the different methods used in environmental impact assessment. During the course students develop their working life skills (e.g. writing, communication skills) and the ability to review environmental problems. They also learn how to resolve extensive environmental projects related problems, causes and consequences.	Only master students in Water resources and Environmental Engineering major in the Environmental Engineering Master Program.	English				Contact teaching	Face-to-face teaching, video lectures and project works. The amount of lecture hours can varied depending teaching resources in every year but independent project working is the main activities in the course. Work load in the course is totally 133 h. The project work is completed as group or individual work.				
University of Oulu	Air Pollution Control Engineering - Practical Solutions	Environmental engineering	Student is able to explain what kind of air emissions originate from different industrial and energy production sectors. Student deepens knowledge obtained in 488213A course and is able to apply it to different practical emission problems. She/he is able to comprehensively describe, choose, design and optimize emission control technologies. Student understands essential regulations and laws concerning emission control.	Master's degree students of the Process and Environmental Engineering study programmes.	English				Contact teaching	Face-to-face teaching Lectures 30 h, exercises 12 h, homework 8 h, teamwork presentations 10 h, and self-study 75.	Written final exam or intermediate exams.			
University of Oulu	Industry and Environment	Environmental engineering	The student is able to identify the main features of the environmental load caused by different industrial sectors. He / she is able to explain typical sources of environmental load in the industry and the emissions caused, and the most important emission treatment techniques and emission control systems. The student is also able to identify uniform features in the environmental loads of different industries. In addition, the student is able to explain how an environmental management system is developed and implemented in a company.	Master's degree students in Process and Environmental Engineering study programs.	English				Online	Online lectures 40 h, learning tasks 45 h, a final exam / a portfolio 60 h. Lectures mainly consist of guest lectures given by experts representing different industrial sectors.	Learning tasks and a final exam / a portfolio.			
University of Oulu	Industrial Water and Wastewater Technologies	Environmental engineering	After completing the course student knows water use and management of water-intensive industrial sectors. He/she knows industrial raw water, process water and waste water treatment technologies and can evaluate optimal usage of water by considering external requirements as well as technical and economical factors. He/she can select water treatment operations on the basis of case-specific needs.	Master's Programme in Process Engineering	English				Contact teaching	Lectures, group work and self-study	The students will be making an essay and a group exercise, which both will be evaluated. Student will participate in final exam after the course.			
University of Oulu	Integrated water resources management	Environmental engineering	This course introduces design concepts and principles that must be taken into account in planning of sustainable use of water resources. After the course students understand different processes, principles and mathematical methods used to manage water resources issues in nordic and global perspectives.	Master students in the water engineering study options of Environmental Engineering program	English				Contact teaching	Face-to-face teaching, assignments, exam Variable learning methods: Lectures, assignments, exam	Variable assessment methods where each submission is graded and weighted separately			
University of Oulu	Renewable Energy	Energy	The student is able to define different methods and techniques on renewable energy production field. The student can describe the energy production from renewable sources and is able to compare the environmental impacts of different ways of producing energy. He/she is able to identify main specific characters, challenges and driving forces in the field.	Master's degree students of Process and Environmental Engineering study programmes.	English				Contact teaching	Contact lectures Lectures 40h, self-study 95h	Written final exam.			

University of Oulu	Sustainable Urban Energy	Energy	The student can explain the concepts and legislative requirements for zero energy buildings and positive energy districts. The student will gain an understanding of the key technologies and key performance indicators (KPIs) of energy sustainable dwellings and sustainable city structures. The student will be able to calculate energy needs of buildings as well as greenhouse gas (GHG) emissions associated with energy consumption. The student can apply the psychometric chart and able to size and select suitable heating, ventilation and air conditioning (HVAC) technologies for different climate zones. The student can also apply energy modelling tools and is able to size building-integrated renewable energy technologies. The student calculate the renewable energy generation potential and make an economic assessment of the applied technologies in terms of payback time and net energy costs.	Master's students of Environmental Engineering, especially of sustainable energy systems orientation; Doctoral students are also welcome to participate.	English				Online	Online course, with pre-recorded video lectures, learning material and exercises. Live video conference and discussion. Self-learning, and self-assessment. Video lectures and tutorials for the calculation exercises. Learning tasks and calculation exercises. Online and face-to-face consultation.	Grading of learning tasks, calculation and sizing exercises. Self-evaluation and self-assessment.			
University of Oulu	Climate.Now (OPEN UNI)	Climate	Upon completion of the course, student can - look at climate change from many different perspectives and create connections between them as well as look for solutions to the climate challenge in a variety of ways - reflect her or his own role in climate change and apply what has been learned on the course - examine different perspectives, solutions, information sources, and the current debate on climate change critically	Open university, high school students	Finnish				Online	Web-based teaching. Studying online material and independent study 46 h, learning task 8 h.	Course grading is based on the learning task.			
University of Oulu	Sustainable development and environmental change (OPEN UNI)	Sustainable development	The aim of the course is to familiarize the student with the core issues of sustainable development and environmental change. After completing the course, the student understands and is able to explain what sustainable development is and what its main challenges are. The student is able to apply the key concepts of the topic and evaluate the significance of major environmental changes for Finland and globally.	Open university, high school students	Finnish				Online	Online teaching (Moodle) The course includes online teaching and preparation of an assignment.	The final grade of the course is determined by the assignment.			
University of Oulu	Sustainable Development	Sustainable development	The student is able to explain the principles of sustainable development and its environmental, economic and social dimensions; knows the goals and indicators of sustainability; and is able outline the future perspectives on the prosperity of human, economic and technological systems.	Master's students of Environmental Engineering.	English				Contact teaching	Implemented as face-to-face teaching. The course largely relies on participatory learning, therefore, there are compulsory participation requirements. Lectures 34 h, guided exercise sessions 8 h, group work 43 h and independent work 50 h.	The course evaluation will be based on the individual work done in the learning tasks and performance in the exercise participation and exercise report. The course unit utilizes a numerical grading scale 1-5 (accepted grades) and zero stands for a fail.			

University of Oulu	Sustainable Development Minor (25 ECTS)	Sustainable development	University of Oulu educates future pioneers to build a more sustainable, intelligent, and humane world. In "Sustainable development" studies you have a chance to learn about different dimensions of sustainability and to choose study modules from different faculties.	Degree and exchange students of UniOulu	Finnish and/or English					University of Oulu offers Sustainable Development Minor (25 ECTS) to all degree and exchange students. The minor is implemented as a collaboration between all faculties. It consists of a multidisciplinary introduction course "Principles of Sustainable Development" (complete 5 ECTS) and studies from different dimensions of sustainability (20 ECTS). Student chooses at least 5 ECTS from each of the three dimensions (environmental and ecological, technological and economic, social and cultural), 15 ECTS in total. On top of this, student chooses freely 5 ECTS from any dimension or from the sustainability-related courses of collaborating networks (FITech, UniPID,				https://oulu.yuja.com/V/Video?v=171311&node=741566&a=1617923445&autoplay=1
OULU	Towards circularity	CE and ethics and SDGs	After completing the course, the student is able to explain the concepts of linear and circular economies and the underlying sustainability challenges that force us to a shift from a linear model to a circular economy with circular business models. The students can summarize the national and EU policies and action plans for CE. In addition, the student can explain and utilize circular economy tools and instruments that are used to promote the transition to a circular economy. The student is able to analyze the capability of the selected products, processes and services to fulfill the requirements of circular economy. In connection with the above, the student can judiciously suggest development needs and practical actions in order to achieve circularity targets.	Master's degree students of process and environmental engineering	English					Lectures 30 h, team work 30 h, self-study 75 h.	Final exam and exercises.			
LUT University/ University of Helsinki/ Aalto University/ University of Eastern Finland/ The Finnish Innovation Fund Sitra	CIRCULARECONOMY.now	Circular economy	Using good ideas to promote sustainable development – research, ponder, discuss, exchange opinions. Objective 1 Develop an overall image of the circular economy and understand its basic principles. Objective 2 Understand the problems related to the way we consume resources today and how the circular economy can help in solving these problems. Objective 3 Familiarise yourself with the methods that could promote the circular economy. Objective 4 Form a vision of the practical actions that could be utilised in different sectors to promote the circular economy.	The Circular Economy.Now study module is hosted on the University of Helsinki's MOOC (Massive Open Online Course) platform, which is open to everyone.	English		The module consists of five different sections. In the first section, students examine the current use of resources and the related challenges and learn about the circular economy model. Sections 2–5 dive deep into the following themes from the perspective of the circular economy: a sustainable food system, forest-based cycles, technical cycles, and transportation and the sharing economy.	Online	The module can be utilised as either a three-credit e-learning course, or as a broader five-credit hybrid course managed by a responsible teacher as part of a university's own curriculum. Circular Economy.now is a 3 to 5-credit module that focuses on learning and teaching the principles of the circular economy. The module can be utilised as either a three-credit e-learning course, or as a broader five-credit hybrid course managed by a responsible teacher as part of a university's own curriculum.		The module has been implemented in cooperation with Lappeenranta University of Technology, the University of Helsinki, Aalto University and the University of Eastern Finland. The main funding provider is Sitra, the Finnish Innovation Fund, whose main themes include a carbon-neutral circular economy. The Circular Economy.now study module was designed and produced in cooperation with the Climate.now project that was initiated in 2016.	https://circularnow.fi/		

CENTOFORM	SUSTAINABLE PRODUCTION AND CE IN THE MECHANICAL SECTOR	Eco innovation	The course is devoted to those who intend to learn the basic principles necessary to deal with issues related to the management of waste or production waste in their company or organization, in order both to comply with the requirements of the relevant legislation and to identify opportunities for the development of circular economy projects. The recipients of the course are employed or non-employed individuals with an interest in working in the area of waste and circular economy issues. Thus, the main corporate figures potentially interested are: HSE managers and their collaborators, environmental management system managers, production/plant managers and employees, personnel involved by the documentary and operations inherent to waste.	Adults willing to achieve basic green skills	Italian	2021	one 32-training hours module. Main contents: general principles of the circular economy Waste regulatory framework, main responsibilities and obligations, document management aspects (loading and unloading registers, forms, MUD), temporary storage management waste classification, EER code assignment, hazardous characteristics permits for waste management facilities and waste transport by-products and opportunities for producers and users voluntary environmental certifications, product eco-labels, LCA concept circular economy project development opportunities and funding calls	32h	blended	teaching session, cooperative learning, case studies' analysis	tests, evaluation of works/exercises	Certificate of attendance	Funded by the EMILIA ROMAGNA REGION (ESF)	https://centoform.it/portfolio/produzione-sostenibile-economia-circolare/
CENTOFORM	ENVIRONMENTAL IMPACT EVALUATION AND CE IN THE BUILDING AND CONSTRUCTION SECTOR	Eco innovation	The objective of the course is to acquire knowledge and skills at an advanced level related to environmental impact assessment and circular economy in relation to the building and construction supply chain.	Adults willing to achieve basic green skills	Italian	2021	Environmental sustainability and climate change, Circular economy applied to the building and construction supply chain Management of atmospheric emissions Management of wastewater discharges Waste management Main proceedings in the environmental field: EIA/AIA/AUA/AU Environmental management systems Environmental certifications Main methodologies for assessing the environmental impact of buildings	32h	blended	teaching sessions, cooperative learning, case studies' analysis	tests, evaluation of works/exercises	Certificate of attendance	Funded by the EMILIA ROMAGNA REGION (ESF)	https://centoform.it/portfolio/valutazione-impatto-ambientale-ed-economia-circolare-applicata-agli-interventi-edil/
CENTOFORM	Environmental sustainability in the industrial processes and circular economy	New Business Models	The course aims at providing to participants knowledge and skills in the design, management, monitoring, and evaluation of projects for the dissemination of a culture of sustainability, for the adoption of approaches and methodologies that promote the adoption of the circular economy paradigm and support the transition to an economy oriented to sustainable production, rational use of resources, reduction of the environmental impact of industrial production processes	Consultants, entrepreneurs, workers	Italian	2021	Sustainable industrial production and CE, Ecodesign Energy performance, business models for circular economy, Life Cycle Thinking and Life Cycle Assessment, Carbon footprint and Carbon neutrality	56h	blended	teaching sessions, cooperative learning, case studies' analysis, project-based learning	tests, evaluation of works/exercises	Certificate of attendance	Funded by the EMILIA ROMAGNA REGION (ESF)	https://centoform.it/portfolio/sostenibilita-ambientale-nei-processi-produttivi-ed-economia-circolare/
CENTOFORM	IFTS COURSE - JUNIOR EXPERT IN CIRCULAR ECONOMY	New Business Models	The course equips the participants with the necessary tools and skills needed for sustainable development and circular transition in economy and society. Following the 3 Rs (reduce, reuse and recycle), they e.g. gain skills in the analysis, evaluation and improvement of manufacturing processes, impact assessment methods, total quality management for environmental sustainability, entrepreneurship and digital literacy	Adults with upper secondary education diploma, ad hoc competences certification	Italian	2022	Gaining a basic understanding of circular economy, its potential and they reflect about their own role; training in evaluating industrial production processes and making suggestions for improvement, applying tools and concepts directly in the daily work of a company, being enabled to explore chances and risks of redesign and new business models and to facilitate innovation workshops	800H	Blended	teaching sessions, cooperative learning, case studies' analysis, project-based learning, internship (30-40%)	tests, evaluation of works/exercises, final exam	Higher technical specialization certificate EQF IV	First pilot funded in 2020 by the EIT Raw Materials and after funded by the EMILIA ROMAGNA REGION (ESF)	https://studycirculareconomy.com/ https://centoform.it/portfolio/ifts-junior-expert-in-circular-economy-2021/

University of Ferrara	CEIS-Circular innovation and international Skills	Circular Economy and Project Management	Sustainable Growth, Circular Economy, Accounting, project management, Cost benefit Analysis	Post graduate, Phd candidates	English	Winter-Summer school	Sustainable development and industrial production Introduction to circular economy Environmental legislation Energy performance Redesigning products and new business models for services The economic evaluation of environmental innovation projects (CBA analysis) Life cycle thinking and analysis Circular economy project management Project financing Budgeting Physical-financial monitoring and risk management Corporate social responsibility Circular economy in productive processes – companies best practices	5 weeks	Hybrid	theoretical and case studies	Final Exam	Emilia Romagna Region		www.unife.it
University of Ferrara	Economics Management and Policies for Global Challenges	Green economy	Green Economy, Economics, Econometrics,	Bachelor degree	English	Master Degree 2 years	Development economics and emerging markets Environmental economics and policy Statistics, Behavioural Economic, Economics of innovation , Energy economics, Financial management, International trade, etc	2 years	in presence	Theoretical and project work	Master thesis	Italian Ministri of research and University		www.unife.it
ANOIS	Circular Business Models	New Business Models	Attendees will gain insight into existing and emerging Circular Business Models. They will gain an understanding into how to create and capture circular value, all while ensuring customers can participate in the Circular Economy.	Entrepreneurs, Senior Management, Designers, Product Managers	English	2023/2024	Creating and Capturing Business Value Facilitated Reuse Remanufacturing Incentive Return On Demand Production Product Service Systems	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Design Strategies	Circular Design	Attendees will gain insight and understanding of the different circular design strategies to enable them to redesign their existing linear products or to design new circular products.	Entrepreneurs, Senior Management, Designers, Product Managers	English	2023/2024	Linear to Circular Design Design for Repair / Durability / Recyclin / Disassembly	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Value Chains	CE and ethics and SDGs	Attendees will gain insight and understanding into how they can assess their existing value chains to determine where circular transitions can be made and to explore the development of circular supply collaborations	Entrepreneurs, Senior Management, Designers, Product Managers, Supply Chain Managers	English	2023/2024	Social & Environmental Lifecycle Assessment, Sustainable Criteria, Traceability	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Materials	Eco innovation	Attendees will gain insight and understanding into the existing and emerging circular materials and how to incorporate them into their products to ensure circular systems are activated	Entrepreneurs, Designers, Product Managers	English	2023/2024	Selecting Materials, Biological/Renewable/Technical/Finite Materials, Traceability	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Designing Long Life Products	Circular Design	Attendees will gain insight and understanding on how they can prolong the lifespan of their products, what policy support is needed and how they can encourage consumers to change behaviour	Entrepreneurs, Designers, Product Managers	English	2023/2024	Design for Repair, Durability, Material Choices, Remanufacturing, Product Service Systems, Incentivised Return	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Designing Short Life Products	Circular Design	Attendees will gain insight and understanding on how they can ensure short life products are circular in a sustainable manner, what policy support is needed and how they can encourage consumers to change behaviour	Entrepreneurs, Designers, Product Managers	English	2023/2024	Design for Recycling, Disassembly, Incentivised Return, On Demand Production, Facilitated Reuse, Material Choices	2-10 hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Packaging	Circular Design	Attendees will gain insight and understanding into relevant circular design strategies, business models and policies for the packaging sector and will explore circular business case studies	Entrepreneurs, Designers, Product Managers	English	2023/2024	Design for Recycling, Disassembly, Incentivised Return, On Demand Production, Facilitated Reuse, Material Choices	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Furniture	Circular Design	Attendees will gain insight and understanding into relevant circular design strategies, business models and policies for the Furniture sector and will explore circular business case studies	Entrepreneurs, Designers, Product Managers	English	2023/2024	Design for Repair, Durability, Material Choices, Remanufacturing, Product Service Systems, Incentivised Return, Ikea & Orange Box Case Studies	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Textiles	Circular Design	Attendees will gain insight and understanding into relevant circular design strategies, business models and policies for the Textile sector and will explore circular business case studies	Entrepreneurs, Designers, Product Managers	English	2023/2024	Design for Repair, Durability, Recycling Material Choices, Incentivised Return	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	
ANOIS	Circular Service Design	Circular Design	Attendees will gain insight and understanding into how Service Design techniques can be used to facilitate a circular transition for business and consumers	Entrepreneurs, Designers, Product Managers	English	2023/2024	Service Design, Product Service Systems, Sharing Economy	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE	

ANOIS	Circular Branding	Circular Design	Attendees will gain insight and understanding into how to effectively and responsibly market their circular products and services. They also explore guidance on how to communicate the environmental and social benefits to avoid greenwashing while improve consumers perceptions of the Circular Economy	Entrepreneurs, Designers, Product Managers, Marketeers	English	2023/2024	Communications, Certifications, Traceability	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Policy	Policy Scenarios	Attendees will gain insight and understanding into existing and emerging global policies with a strong focus on the European Commission's Circular Economy Action Plan 2, the Sustainable Product Initiative and result Directives and Legislative Changes. They will explore to future proof regions and countries and ensure a Just Transition to a Circular Economy for all citizens	Policy Makers, NGOs, Citizens	English	2023/2024	Circular Value Chains, Circular Infrastructure, Circular Skills	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Industry 4.0	Eco innovation	Attendees will gain insight and understanding on how emerging technologies such as AI, machine learning and automation can enable a circular transition	Entrepreneurs, Designers, Product Managers	English	2023/2024	AI, Automation, Materials	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Societies	Circular Design	Attendees will explore how we can future proof our European lifestyle while ensuring a Just Transition to a Circular Economy for all citizens	Policy Makers, NGOs, Designers, Citizens	English	2023/2024	Circular long & short life products. Circular Lifestyles, Circular Policies, Circular Skills	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Design philosophy	Circular Design	Attendees will gain insight and understanding of historic design movements and will work collaboratively to create emerging design philosophies for a circular transition.	NGOs, Designers, Citizens	English	2023/2024	Design Movements History, Material History, Design	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Cities	Climate neutral cities	As the urbinsations becomes more dominate as a form of living, attendees will gain insight and understanding into the infrastructure, policies behaviour change required to create a circular economy within cities. Urban Mining, Urban Manufacturing and a localised Circular Economy developments will be explored	Policy Makers, NGOs, Designers, Citizens	English	2023/2024	Urban Manufacturing, Circular Skills, Circular Lifestyles, Circular Policies,	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE
ANOIS	Circular Built Environment	Climate neutral cities	Attendees will gain insight and understanding on how we can design new buildings to be circular, while also ensuring we retain as much existing buildings and constructions materials as possible	Policy Makers, NGOs, Designers, Citizens	English	2023/2024	Modular Buildings, Adaptotive Reuse, Meanwhile Use, Abolish Demolish, Mateial Reuse & Recycling	2-5 Hours	Online	Live web-based teaching and discussion, online live cooperative learning, case studies' analysis	None	Certificate of attendance	TICHE