Syllabus

Descrizione corso

Titolo insegnamento	Sustainable engineering design: theory, application, evaluation
Codice insegnamento	47599
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	IIND-03/B
Lingua	Inglese
Corso di Studio	Corso di laurea magistrale in Ingegneria Industriale Meccanica
Altri Corsi di Studio (mutuati)	
Docenti	prof. Yuri Borgianni, Yuri.Borgianni@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/35189 dr. Aurora Berni, Aurora.Berni@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/42284
Assistente	
Semestre	Secondo semestre
Anno/i di corso	all
CFU	3
Ore didattica frontale	30
Ore di laboratorio	0
Ore di studio individuale	75
Ore di ricevimento previste	9
Sintesi contenuti	The course combines fundamentals of sustainable design and human-product interaction to enable the development of sustainable products featured by more probable consumer acceptability.
Argomenti	Sustainable engineering and product design, Circular design, Bio-

dell'insegnamento	materials, Human-Product Interaction, Attractiveness and marketing of sustainable products
Parole chiave	Sustainability; Eco-design; Circular Economy; User Experience; Life Cycle Assessment
Prerequisiti	none
Insegnamenti propedeutici	
Modalità di insegnamento	Because of the blended format, multiple teaching and learning formats are foreseen: - online lectures disseminating the fundamentals of the discipline - in-presence seminars for deepening specific topics - teamwork - in-presence lectures to provide further instructions for the teamwork - workshops
Obbligo di frequenza	The attendance of the "in-presence-week" is mandatory
Obiettivi formativi specifici e risultati di apprendimento attesi	Learning outcomes: Creating awareness of the opportunities to design more sustainable products and systems and get preliminary feedback on the acceptability of solutions.
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	- Different strategies for sustainable design - Circular design - Fundamentals of User Experience - Interplay of factors determining the goodness of sustainable design actions
Modalità di esame	The assessment is based on the evaluation of the teamwork presentation (50%) and an individual test in the fashion of multiple-choice (50%)
Criteri di valutazione	For the teamwork: • reasonable application of selected sustainable design principles for a redesign case study. • motivated approach to illustrate the developed concepts to other groups for preliminary evaluation • clarity and completeness of the presentation For the individual test, the number of correct answers will be counted.

Bibliografia obbligatoria	none; required materials for learning will be provided during the BIP/course
Bibliografia facoltativa	
Altre informazioni	
Obiettivi di Sviluppo Sostenibile (SDGs)	Utilizzo responsabile delle risorse, Istruzione di qualità