Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Sustainable engineering design: theory, application, evaluation
Code der Lehrveranstaltung	47599
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	IIND-03/B
Sprache	Englisch
Studiengang	Master in Industrie- und Maschineningenieurwesen
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	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
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Zweites Semester
Studienjahr/e	all
KP	3
Vorlesungsstunden	30
Laboratoriumsstunden	0
Stunden für individuelles Studium	75
Vorgesehene Sprechzeiten	9
Inhaltsangabe	The course combines fundamentals of sustainable design and human-product interaction to enable the development of sustainable products featured by more probable consumer

	acceptability.
Themen der Lehrveranstaltung	Sustainable engineering and product design, Circular design, Bio-materials, Human-Product Interaction, Attractiveness and marketing of sustainable products
Stichwörter	Sustainability; Eco-design; Circular Economy; User Experience; Life Cycle Assessment
Empfohlene Voraussetzungen	none
Propädeutische Lehrveranstaltungen	
Unterrichtsform	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
Anwesenheitspflicht	The attendance of the "in-presence-week" is mandatory
Spezifische Bildungsziele und erwartete Lernergebnisse	Learning outcomes: Creating awareness of the opportunities to design more sustainable products and systems and get preliminary feedback on the acceptability of solutions.
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	- Different strategies for sustainable design - Circular design - Fundamentals of User Experience - Interplay of factors determining the goodness of sustainable design actions
Art der Prüfung	The assessment is based on the evaluation of the teamwork presentation (50%) and an individual test in the fashion of multiple-choice (50%)
Bewertungskriterien	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.
Pflichtliteratur	none; required materials for learning will be provided during the BIP/course
Weiterführende Literatur	
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	Nachhaltiger Konsum und Produktion, Hochwertige Bildung