Electives “Sustainable Business and Technology” B.Eng.
Summer Semester 2020

Financial Management (Prof. Dr. Christian Kammlott)
Students will develop an in-depth understanding for the (financial) situation of companies, especially based on financial analytics and key performance indicators. After completing the module, they will be able to identify strengths, weaknesses and potentials of companies, identify adequate financing instruments, work out restructuring and optimization measures and map their financial consequences. Furthermore, the students will be enabled to apply the learned connections to new and practical cases. In addition, students train their social skills by assuming responsibility and willingness to learn through the self-responsible pre- and post-processing of content, recognizing and solving problems themselves, and taking on teamwork (learning) responsibility for other students as well. During presentations, students learn to professionally present their learning outcomes and to be responsible for them.

Environmental Policy (Prof. Dr. Dirk Löhr)
Students will gain key knowledge about the basic concepts in discussion and the actors and patterns of environmental politics in Germany and other countries. They will be able to critically discuss key issues in environmental policy and to apply the concepts in the analysis of the contemporary discussion.

Solar Energy (Prof. Dr. Henrik te Heesen)
The students know the basics of solar energy in particular photovoltaic and solar thermal systems. They recognize technical issues and are able to apply the knowledge to typical questions in solar energy.

Sustainable Conflict Resolution – Sustainability and Law (Prof. Dr. Kathrin Nitschmann)
The students will gain knowledge about sustainable dispute resolution strategies and restorative justice in different cultural contexts and expand knowledge about the relationship of sustainability strategies and law and about the analysis of legal textual genres and legal thinking. They will become familiar with recognized alternatives of dispute resolution and their importance for sustainable decision finding within communities. They will understand the implementation of these alternatives into legal systems as part of the necessary framework for the implementation of sustainable strategies.

Sustainable Development Goals (Prof. Dr. Milena Valeva)
This course offers an overview & engagement of the global agenda of United Nations (UN) in regard to sustainability - Sustainable Development Goals (SDGs). Within this module students will understand and reflect on the historicity and systematics as well as on the local application of the SDGs. In order to expand the professional, methodical and personal competences in the area of UN SDGs, students will develop in teams action portfolios as local interpretation and implementation of a chosen SDG and based on that concept a real or fictional application of the action portfolio in the local context of the Birkenfeld region will be conducted.
Geoengineering (Prof. Dr. Peter Fischer-Stabel)
This course provides students with the fundamentals of meteorology and climate sciences as well as the basic principles of climate modelling to understand the climate system. Based on this knowledge, the participants will be introduced in the different concepts and technologies, but also the potential and risks of Geo-Engineering. As a general learning goal, students should be able to follow the ongoing discussion regarding climate engineering and its effects on an objective science based level. In addition, they should be able to estimate the effort needed and the potential effects by the application of this technologies.