

h_da

darmstadt university
of applied sciences



Hessen International Summer University 2025

<https://isu.h-da.de/>

Course: *Sustainable Supply Chains*

CLASS HOURS

Consult preliminary program schedule on our website.

Academic Directors

Prof. Dr. Johanna Bucerius

Prof. Dr. Armin Bohnhoff

Prof. Dr. Monika Futschik

Prof. Dr. Rico Wojanowski

Guest Lecturer

Prof. Kyle Allison, University of Wisconsin Platteville

1) INFORMATION ON THE COURSE CONTENT

COURSE DESCRIPTION

The over-exploitation of natural resources required to achieve economic growth and development has had a negative impact on the environment while also causing these resources to become scarcer and costlier. It is therefore easy to see why the idea of a circular design of products and systems that offers new ways to create more sustainable supply chain models, is taking hold across the globe.

This course is designed to help you understand the growing business case for sustainable supply chain solutions covering topics from environmental social governance in supply chain and supplier management, carbon accounting, green and sustainable distribution and innovative technology solutions. Participants will learn how to design, manage and lead a sustainable supply chain by incorporating circular material, product and system design into your strategies to support sustainable growth. Different requirements of supply chain tiers and various industries such as automotive, retail, pharmaceutical and chemical supply chain are considered in this course.

LEARNING OBJECTIVES

To provide an introduction to the basic concepts of sustainable supply chains. Students should be able to conceptualize a sustainable supply chain approach for a specific business, dedicated product and for regions.

Next to various field trips, participants will engage in a business simulation game by implementing a sustainable strategy for a virtual chocolate milk manufacturer. Participants will be confronted with various real-life, real-time dilemmas. They will be compelled to make decisions that are critical to maintain a fair balance between profitability and sustainability. Participants learn to align and set the right priorities in creating a sustainable supply chain.

COURSE MATERIALS

To be added later

TENTATIVE CLASS SCHEDULE

Class hours virtual: 8 contact hours

Class hours on-site: 76 contact hours

Self-study (virtual & on-site; including virtual group work): 52 contact hours

Total: 136 contact hours (1 contact hour = 45 minutes)

<i>Date</i>	<i>Topic</i>	<i>Type of Seminar</i>
Mid-May	Virtual pre-arrival meeting	Online
End of May/early June	Virtual group project (3-4 virtual sessions)	Online
June 21	Arrival in Darmstadt	Darmstadt
June 22	Welcome session, city tour, campus tour, welcome dinner	Darmstadt
June 23	Intercultural training, part 1	Darmstadt
June 24	Intercultural training, part 2	Darmstadt
June 25	Seminar: Presentation of virtual session results & introduction to sustainable supply chain management	Darmstadt
June 26	Company visit: Riese & Müller (leading cargo bike manufacturer)	Mühltal
June 27	Seminar: Carbon accounting	Darmstadt
June 30	Seminar: Introduction triple connection & sustainability and supply chains and best practices/technologies	Darmstadt
July 01	Seminar: Triple connection	Darmstadt
July 02	Seminar: Triple connection	Darmstadt
July 03	Seminar: Triple connection	Darmstadt
July 04	Seminar: Triple connection	Darmstadt
July 07	Seminar: Case study presentation Tutorial: how to make a reel	Darmstadt
July 08	Departure for Klettwitz	
July 09	Company visit: Visit and try autonomous driving and learn about electro mobility at Dekra (battery test center) at Lausitzring Evening: Departure for Berlin	Klettwitz
July 10	Morning: Meeting with member of parliament Afternoon: BMW motorbike production site	Berlin
July 11	All day: Visit Koawach production	Berlin
July 14	Company visit: DHL Innovation Center (learn about DHL's innovative logistics solution in context of sustainability and automation)	Troisdorf

July 15	Company visit: Alnatura	Lorsch/Darmstadt
July 16	Seminar: Final presentations	Darmstadt

2) INFORMATION ON CLASS PARTICIPATION, ASSIGNMENTS AND EXAMS

ASSIGNMENTS

Active participation and group work on a regular basis.

EXAMS

Group presentation of project assignments and answering questions related to the project work.

PRACTICE MATERIALS

Online manuscripts to be prepared and distributed among the participants via Moodle (online learning system).

PROFESSIONALISM & CLASS PARTICIPATION

Students are expected to attend the classes and dedicate 1-2 hours a day for preparation through reading and self-study. The participation and self-study will enable the students to answer questions, lead discussions and to contribute with own ideas and opinions.

MISSED CLASSES

No more than 10% of the contact hours can be missed for successful completion of the course module. If students miss a lecture or tutorial it is their own responsibility to obtain information on the topics. In the event of sickness, a medical certificate must be presented to the ISU program coordinator.

3) INFORMATION ON GRADING AND ECTS

ACADEMIC STANDARDS

Upon successful completion, 6 ECTS will be awarded for the class.

According to the rules of ECTS, one credit is equivalent to 25-30 hours student workload.

GRADING SCALE

Percentage	Grade		Description
90-100%	15 points	1.0	very good: an outstanding achievement
	14 points		
	13 points	1.3	
80-90%	12 points	1.7	good: an achievement substantially above average requirements
	11 points	2.0	
	10 points	2.3	
70-80%	9 points	2.7	satisfactory: an achievement which corresponds to average requirements
	8 points	3.0	
	7 points	3.3	
60-70%	6 points	3.7	sufficient: an achievement which barely meets the requirements
	5 points	4.0	
0-60%	4 points	5.0	not sufficient / failed: an achievement which does not meet the requirements
	3 points		
	2 points		
	1 point		
	0 points		

This course description was issued on December 18, 2024. The program is subject to change.