

## PHD COURSE APPLICATION FORM

Please read '<u>Standards and guidelines for PhD course applications</u>', before you fill in the form. The application should not exceed three pages.

The application form must be submitted to the secretary and the director of the relevant doctoral programme who is responsible for the doctoral programme's overall course programme. The internal hours must be approved by the head of department.

### Course organizer (name, department and research group):

Mohammad B. Rana Associate Professor and Head of CREATE Research Project, Sustainability Lab & International Business Research Group Aalborg University Business School

## Title and date of the course:

#### Sustainability and Circular Economy in a Methodological Perspective (ECTS 5)

1/08/2023--04/08/2023

#### Location:

Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh.

This University is the primary partner of CREATE research project on Circular Economy in Apparel Industry in Bangladesh.

### PhD-course Coordinator:

Mohammad Bakhtiar Rana, Associate Professor, Aalborg University Business School (AAUBS).

Deputy-Course Co-Ordinator:

Imranul Hoque, PhD, Professor at Jagannath University, Dhaka, & Adjunct Professor at AUST.

#### Lecturers:

Mohammad B. Rana, Associate Professor, Aalborg University Business School (AAUBS), (CE Concepts/Methodology)

Jonas Strømfeldt Eduardsen, Associate Professor, Aalborg University Business School (Philosophy of science & methodology)

Lindsay Whitefield, Professor, Copenhagen Business School, (Sustainability concept)

Olav Jull Sørensen, Professor of International Business, Access2Innovation (methodology/ CE concepts) Imranul Hoque, PhD (AAU), Professor (methods on Systematic Literature Review)

The instruction hours will be supplemented with guest speakers from industry/institution and visits to relevant firms and institutions.

<b>Subject-specific PhD course</b> (PhD courses that are typi-
cally relevant to PhD students within the doctoral pro-
gramme organizing the PhD course. Examples of subject-

**Generic PhD course** (PhD courses that are typically organized by the doctoral school and are relevant to a broad segment of PhD students across doctoral programmes.



specific PhD courses are methodological courses relevant	Examples of generic PhD courses are pedagogical
to a given research group and presentations of specific re-	courses, academic writing, research ethics etc):
search traditions):	

## Course description, incl. learning objectives and prerequisites:

The aim of this introductory PhD-course is to provide students with basic insight into the scientific fields of sustainability and circular economy together with methodological approaches. With this insight, the course aims to present and discuss the practical approaches of how to investigate and conduct empirical studies related to the fields to generate new science-based knowledge. The context of the course will primarily be the garment industry/ apparel global value chains with specifics on Bangladesh and Europe.

In the end of the course, PhD students will be able to achieve the following learning outcomes:

- 1. Understand the concepts and dynamics of sustainability and circular economy in connection with various methodologies.
- 2. Learn about the philosophy of science and methodologies to explore a 'fit' between the specific research problem and the methodological approach.
- 3. Know how to make research design including the problem formulation and the selection of ontology and epistemology for sustainability and circular economy research.

# **Prerequisites of Participants:**

The participants are primarily 1st year PhD-students partly from the CREATE research project or other DANIDA funded research projects, and partly from other PhD programs in public Universities in Bangladesh. To take part in the PhD course, participants must have the right qualifications and research interest. PhD students with a background of business studies, social sciences, and combination of technical sciences and business are welcome to apply. While PhD-students are prioritized, young researchers affiliated with universities may also participate to sharpen their research capabilities provided the limit of 20 participants does not exceed.

#### **Course Structure:**

The course has FOUR parts:

Part I: The basic nature of the fields and theories of Sustainability and Circular Economy and how they are interconnected.

Part II: Philosophy of Science (philosophy of science, ontology, epistemology, and methodological perspectives)

Part III: Research Methodology III (qualitative and quantitative methodologies including case study, storytelling science and critical incident techniques, and literature review techniques).

Part IV: Formulate a research question, conduct a brief literature review, and prepare a research design including data collection and analysis method. The research question will likely focus on sustainability/circular economy within the scope of apparel industry.

Part IV runs in parallel with Part II and III.

Day/Date	Teacher's name	Part/Time	Themes	Contents
01/08/2023	Mohammad B. Rana	Part-I 10:00-13:00	Sustainability & Circular Economy	Introduction to Sustainability and Circular economy in textile and garments GVCs, Key Dynamics and challenges at systems, firms, and individual levels, and the way forwards.



	Olav Jull Sørensen	14:00-17:00		
02/08/23	Jonas Strømfeldt Eduardsen	Part-II 09:00-13:00	Philosophy of Science (Including ex- ercise, if any)	
		14:00-17:00	Qualitative Methods	Case studies- single case, multiple and embedded case studies
03/08/23	Lindsay Whitfield	Part-III 09:00-11:00	Qualitative Methods	
	Jonas Strømfeldt Eduardsen	11:15- 13:15	Quantitative Methods	
	Imranul Hoque & Mohammad B. Rana	14:15-16:00	Systematic Lit- erature Re- view & Story- telling	RQ and Systematic review techniques, Literature search, Coding, Framing and Conceptualization. Storytelling Science Method.
	Olav Jull Sørensen	16:00-17:00	Wrapping up:	A Summery on Qualitative Research- CIT and Social Constructivism.
05/08/23	Olav Jull Sørensen Lindsay Whitfield Jonas Strømfeldt Eduardsen Imranul Hoque Mohammd Rana	Part-IV 9.00-13:00 14:00-17:00	Workshop- Whole day_group- wise (4-5 per- sons in a group)	Formulate a research question, conduct a brief literature review, and prepare a research design including data collection and analysis method.

Relevant readings will be supplied to participants before commencing the course. They will require to submit an essay before the course begins.

# **Teaching methods:**

# **Course Plan and Format**

Problem & project-based learning (PBL) pedagogy will be followed.

The PhD-course is scheduled for the Autumn 2023. It has a total of 8 sessions over 4 days. The teaching comprises face-to-face lecture, workshops, group works, and assignments. Students are also required to read through the list of articles and reading materials required to write an essay and do the groupwork.

Students will work on assignments/mini projects in a group of 3-4.

Exam:



The exam consists of an individual written exam (four hours) or an oral group project exam of one hour based on a report prepared by the student group.

## Description of paper requirements, if applicable:

There is no requirement of paper writing. However, Students in a group of three-four will formulate a problem related to sustainability and/or circular economy and prepare a research note (max 10 pages) comprising the research question, and how the problem will be investigated using what ontology, epistemology, and methodology (including methods).

# **Key literature:**

The literature consists of a basic book on research methodology and philosophy of science, and a set of articles related to sustainability and circular economy as well as cases. The literature list is divided into two: Compulsory readings and supplementary readings.

Compulsory Readings:

#### BOOKS:

Abnor, I. and Bjerke, B. (3rd Eds.) (2009) Methodology for creating business knowledge, Sage Publication, London. (i.e., for Methodological perspectives)

Holm, A. B., (2013) Philosophy of Science: an introduction for future knowledge workers, Samfunds Literatur, Denmark (i.e., for Philosophy of science)

Saunders, M., Lewis, P. & Thornhill, A. (5th Eds.) (2009) Research Methods for business students, Edinburgh: Pearson Education (i.e., for methods)

### ARTICLES:

Eisenhardt, K.M. (1989a) Building theories from case study research, Academy of Management Review, Vol. 14 (4), pp. 532-440

Flyvbjerg, B. (2006) Five misunderstandings about case-study research, Qualitative Inquiry,12 (2), pp.219-245 Ghauri, P.N. and Firth, R. (2009) The formalization of case study research in international business, International Journal of Marketing, 48 (1-2), pp. 29-40

Yin, R.K. (2009) Case study Research-design and methods, Fourth edition, Sage Publication, USA.

Rana, M. B., & Tajuddin, S. A. (2021). Circular Economy and Sustainability Capability: The case of H&M. In M. B. Rana, & M. M.C. Allen (Eds.), Upgrading the Global Garment Industry: Internationalization, Capabilities and Sustainability (pp. 253-282). Edward Elgar Publishing. New Perspectives on the Modern Corporation series <a href="https://doi.org/10.4337/9781789907650.00019">https://doi.org/10.4337/9781789907650.00019</a>



Boje, D. M., & Rana, M. B. (2021). Defining a sustainability-driven business modeling strategy with a storytelling science approach. In S. Markovic, C. Sancha, & A. Lindgreen (Eds.), Handbook of Sustainability-driven Business Strategies in Practice (pp. 59-77). Edward Elgar Publishing. <a href="https://doi.org/10.4337/9781789908350.00014">https://doi.org/10.4337/9781789908350.00014</a>

Barford, A., & Ahmad, S. R. (2022). Levers for a corporate transition to a plastics circular economy, *Business Strategy* and the Environment, 1–15. <a href="https://doi.org/10.1002/bse.3182">https://doi.org/10.1002/bse.3182</a>

Chen, X., Memon, H.A., Wang, Y. et al. Circular Economy and Sustainability of the Clothing and Textile Industry. Materials Circular Economy, 3, 12 (2021)

Matson, P. Systems-level partnerships for sustainability at scale. Nature Sustainability, 5, 1–2 (2022). https://doi.org/10.1038/s41893-021-00813-4

# Minimum and maximum number of participants:

Expected 15-20 participants.

#### Number of ECTS:

The is a FIVE ECTS course corresponding to 135 working hours teaching plus learning load.

Internal hours (please argue why, if you apply for additional hours for developing a new course or for substantial changes of existing courses, cf. the standards and guidelines):

# Budget:

- Travel expenses:

Travel expenses of the lecturers will be borne by the CREATE project funded by DANIDA.

- Honorarium:

### N/A

- Meals:

Meals will be provided to participants under CREATE project management.

Other (please specify):

# N/A

Participant fees, if applicable (generic PhD courses only):

Participants will pay TAKA 6000 fees to attend the course, which shall be used for their meals and course materials.

- Co-financing:

The course will be co-financed by CREATE.

# Amount to be covered by the PhD course funds:

## N/A

Other comments:

Organization of the course is part of the CERATE project objective, which will allow us to internationalize the DANISH PhD education, in particular AAUBS's PBL education to the outer world making a social impact in Bangladeshi education system on sustainability and circular economy area. It will be part of the activities of Sustainability lab at AAUBS.