

Elective Course: Research Methods & Writing

Title	Elective Course: Research Methods & Writing
Semester	E2023
Master programme in	Computer Science / Digital Transformation
Type of activity	Course
Teaching language	English
Study regulation	Read about the Master Programme and find the Study Regulations at ruc.dk

REGISTRATION AND STUDY ADMINISTRATIVE

Registration	You register for activities through stads selvbetjening during the announced registration period, which you can see on the Study administration homepage. When registering for courses, please be aware of the potential conflicts and overlaps between course and exam time and dates. The planning of course activities at Roskilde University is based on the recommended study programmes, which should not overlap. However, if you choose optional courses and/or study plans that goes beyond the recommended study programmes, an overlap of lectures or exam dates may occur depending on which courses you choose.
Number of participants	
ECTS	5
Responsible for the activity	Raluca Alexandra Stana (raluca@ruc.dk)
Head of study	Nina Boulus-Rødje (ninabr@ruc.dk)
Teachers	
Study administration	IMT Registration & Exams (imt-exams@ruc.dk)
Exam code(s)	U60595

ACADEMIC CONTENT

Overall objective	The purpose of elective courses is to give the student opportunities to specialize within a specific subject area, where the student acquires knowledge, skills and competences in order to translate theories, methods and solutions ideas into their own practice.
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Detailed description of content

Every good research project starts with wondering about the world around us. But how can you find that one important question that you can see yourself dedicating a whole semester to investigating? And how do you go about exploring and trying to answer that question? This is what this course will equip you with.

Different research projects may have different motivations and goals. Some research projects start with a specific domain to be investigated or explored, others have the goal to test a theory, and some have the goal to solve an organizational problem. Regardless of the different motivations and goals, all research projects need to be situated within the greater discipline, discuss relevance to the scientific literature, and formulate a clear contribution.

There are many types of research traditions and different methodologies: from literature reviews to classical qualitative/quantitative studies, theoretical papers, or more innovative methods such as based on autoethnography. In the course, we investigate these different types and discuss how to evaluate and select which methodology is most appropriate for your research, and what are the implications that this choice has on your research project.

Similarly, we will discuss different data gathering techniques and strategies, including, for example, interviews, diary data, netnography, auto ethnography, and SoMe data. We will also cover evaluation techniques in relation to scientific rigor (for e.g., validity and reliability, bias, triangulation, etc.). The course will also include various strategies for analysing empirical data (for e.g., qualitative or quantitative data), and we will learn about the crafts of reading scientific articles efficiently and crafting scientific arguments.

After completing this course, the student will be able to:

- Describe and explain the different research methodologies and methods
- Discuss and critically reflect upon the strengths and weaknesses of different methods
- Describe, analyse, discuss and critically reflect upon different data gathering techniques
- Demonstrate knowledge of ensuring scientific rigor
- Identify and apply relevant data analyses techniques.

Course material and Reading list

A mixture of literature addressing the various topics in the course. Please consult Moodle for the final literature list.

Overall plan and expected work effort

Study effort: The course's 5 ECTS correspond to a total of 135 hours workload with:

- 40 hours lectures and exercises,
- 70 hours of preparation over a 10 week course period, and
- 25 hours for the exam and preparation before the course period.

Format

Learning activities: The teaching is designed as a workshop, combining classic lectures and exercises.

Evaluation and feedback

Evaluation form to be filled out (anonymously) plus open discussion on the last course day.

	Feedback will be continuously collected during the semester.
Programme	
ASSESSMENT	
Overall learning outcomes	After completing this course, students will be able to: • demonstrate knowledge within a defined subject area. • demonstrate an overall overview and understanding of the general principles behind the field's theory, methods and technological solutions. • choose and apply appropriate methods and techniques relevant to the field to analyse, design and implement solutions • work with it-related problems within their field, both individually and in groups. • be proficient in new approaches within the subject area in a critical and systematic way and thereby independently take responsibility for their own professional development.
Form of examination	Take-home assignment written in a group Permitted group size: 2-5 students. Assignments written by a group must be individualised. The character limits of the assignment: For 2 students: maximum 36,000 characters, including spaces. For 3 students: maximum 40,800 characters, including spaces. For 4 students: maximum 43,200 characters, including spaces. For 5 students: maximum 45,600 characters, including spaces. The character limits include the cover, table of contents, bibliography, figures and other illustrations, but exclude any appendices. The students start writing the take-home assignment during the course. The duration is 10 weeks and may include public holidays. The submission deadline will be announced on study.ruc.dk. Assessment: 7-point grading scale
Form of Re-examination	Samme som ordinær eksamen / same form as ordinary exam
Type of examination in special cases	The same form as ordinary exam
Examination and assessment criteria	The written exam will be assessed based on the extent to which the student is able to fulfil the following criteria • Describe and explain the different research methodologies and methods • Discuss and critically reflect upon the strengths and weaknesses of different methods • Describe, analyse, discuss and critically reflect upon different data gathering techniques • Demonstrate knowledge of ensuring scientific rigor • Identify and apply relevant data analyses techniques and whether the written exam meets all the formal requirements.

Exam code(s) Exam code(s) : U60595

Course days:

Hold: 1

Research Methods and Writing (DIGIT)

time	14-09-2023 12:15 til 14-09-2023 16:00
forberedelsesnorm	ikke valgt
forberedelsesnorm D-VIP	ikke valgt
location	07.1-008 - undervisningslokale (60)
Teacher	Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time	21-09-2023 12:15 til 21-09-2023 16:00
location	07.1-021 - undervisningslokale (30)
Teacher	Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time	28-09-2023 12:15 til 28-09-2023 16:00
location	07.1-033 - undervisningslokale (30)
Teacher	Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time	05-10-2023 12:15 til 05-10-2023 16:00
location	07.2-033 - undervisningslokale (30)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 12-10-2023 12:15 til
12-10-2023 16:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

location 05.2-032 - teorirum (65)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 19-10-2023 12:15 til
19-10-2023 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 26-10-2023 12:15 til
26-10-2023 16:00

location 10.1-025 - teorirum (32)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 02-11-2023 12:15 til
02-11-2023 16:00

location 10.1-025 - teorirum (32)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 09-11-2023 12:15 til
09-11-2023 16:00

location 07.1-033 - undervisningslokale (30)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing (DIGIT)

time 16-11-2023 12:15 til
16-11-2023 16:00

location 07.2-033 - undervisningslokale (30)

Teacher Raluca Alexandra Stana (raluca@ruc.dk)

Research Methods and Writing - Hand-in (DIGIT)

time 27-11-2023 10:00 til
27-11-2023 10:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

Research Methods and Writing - Reexam hand-in (DIGIT)

time 14-02-2024 10:00 til
14-02-2024 10:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt