

Q1. Elaborate one example of research question and one example of hypothesis in your area of research.

[What is intended here is that you practice, not that you find a relevant research problem]

[Try to CAREFULLY formulate them according to the discussed rules]

23 Jan 2024

Q2. Consider the application of either the “traditional” scientific method or the design science research method to your work plan.

In this context, which strategy can you foresee to validate your thesis? How will you get validation data? Which validation approach?

Give details and be concrete.

[Focus ONLY on the validation step, do not describe all other steps]

23 Jan 2024



Q3. Searching on ISI SCI and SCIMAGO, identify 3 relevant journals in your area

24 Jan 2024

(with simultaneously good impact factor SCI and quartile Q1 Scimago)

Q4. Assume that you are a member of the Program Committee for a conference. As such, choose and evaluate one paper:

24 Jan 2024

- <https://sites.fct.unl.pt/doutoramento-engenharia-electrotecnica-computadores/files/doceis-03.pdf>
- <https://sites.fct.unl.pt/doutoramento-engenharia-electrotecnica-computadores/files/doceis-14.pdf>
- **Evaluation form:**
<https://sites.fct.unl.pt/doutoramento-engenharia-electrotecnica-computadores/files/reviewform.doc>

Q5. Multi-disciplinary research is becoming more and more important.

A) Identify 5 (potential) relevant benefits and 5 main risks of multi-disciplinary research.

B) What is the difference between interdisciplinarity and multi-disciplinarity?

C) Identify 3 benefits and 3 obstacles in collaboration university-industry.

25 Jan 2024

Q6. Identify 2 or 3 tools/platforms for developing a project portal.

- Define and justify your criteria for tools selection
(... Take into account the collaboration needs)
- Apply AHP to rank them.

29 Jan 2024

[groups of 3 or 2 students]

Q7. Using both ISI Web of Science / or SCOPUS and Scholar Google, verify the number of citations and h-index of

- Your supervisor
- Another professor in the department
- Another professor from University of Cardiff or University of Eindhoven

29 Jan 2024

Q8. Write a short survey paper (min 3, max 4 pages) on (choose one):

Option 1: the role of ethical issues regarding publication of results [see Unit 10]

Option 2: the impact of GDPR on research data [see Unit 10]

Option 3: how to prepare review meetings in an international research consortium [see Unit 8]

focusing your area of research (i.e. electrical and computer engineering).

1 Feb 2024

*Consider the guidelines for writing survey papers studied in the course. [See Unit 3 & Unit 4]. **Use IEEE template format***

Q9. Briefly distinguish between IP protection and IP enforcement.
Which mechanisms for each case?

30 Jan 2024

Q10. A. Briefly describe the steps of “Environmental scanning”

1 Feb 2024

B. Briefly describe the main steps of a roadmapping process.

Q11. Group work: Preparation of project proposal for a H2020 ICT
or H2020 Marie Curie or FCT

23 Feb 2024
17:00
(Lisbon time)