

24RM801 Research Methodology for Engineering

Assignment 1: Research Question Development and Design

Submission Date: 14/01/25

Objective: Develop a clear and focused research question related to your research work and design a questionnaire that minimizes bias.

Instructions:

1. Research Question Formulation:

- a) Identify a specific area of interest within your research field.**
- b) Develop a research question that is clear, focused, and researchable.**
Ensure it addresses a gap in the existing literature.

2. Questionnaire Design:

- a) Create a questionnaire consisting of at least 10 questions that will help answer your research question.**
- b) Ensure to include a mix of open-ended and closed-ended questions.**
- c) Pay special attention to the following aspects to avoid bias:**
- d) Use clear and neutral language in your questions.**
- e) Avoid leading questions and ensure balanced framing.**
- f) Consider the order of questions to minimize order effects bias.**

3. Canva Presentation:

- a) Use Canva to create a visually appealing presentation that includes:**
- b) Your research question.**
- c) An overview of the questionnaire design process.**
- d) Examples of your questions with explanations on how they minimize bias.**

4. Submission:

- Share your Canva presentation link along with a brief reflection (200-300 words) on the importance of unbiased research question formulation and design in contributing to valid research outcomes.