

Research Methods and Professional Practice Reflection

What?

Research Methods and Professional Practice is my seventh module in the MSc Computer Science programme, marking almost one and a half years of steady academic and personal growth. With the dissertation approaching, this module has served as a reflective milestone, allowing me to consolidate what I have learned so far. When I first joined the programme, I expected it to be heavily focused on programming and technical projects, providing mostly hands-on experience. However, modules such as Research Methods and Professional Practice have made me realise that coding and problem-solving, while essential, are only part of what makes a successful software engineer. Research, planning, documentation, evaluation, and ethical awareness are equally vital. A good engineer must be able to balance technical expertise with critical thinking and structured inquiry.

At the beginning, I found this module quite intimidating. Going through each unit and its deliverables left me feeling unsure of my ability to cope. Academic writing has never been my strongest skill, and I had little prior exposure to formal research. During my undergraduate studies in Electronics and Telecommunication Engineering, I had not conducted research before. The new terminology, literature review, research proposal, quantitative and qualitative data, and sampling techniques were overwhelming. I initially hoped this would be a team-based module to share the workload, but to my surprise, it was entirely individual, pushing me to take ownership of my learning.

To structure my reflection, I have adopted Rolfe *et al.*'s (2001) What? So What? Now What? framework, which provides a simple yet effective structure for analysing experience and deriving insights. Alongside this reflection, I have maintained an e-portfolio to document my progress throughout the MSc programme. This evolving record highlights my professional development and can be accessed [here](#).

So what?

Where there's a will, there's a way. My biggest challenge in this module was understanding what a literature review and a research proposal actually involved, and why they were so important in academic work. At first, these terms sounded complex and unfamiliar. To get a better grasp, I started exploring whatever I could find online, blog posts, YouTube tutorials, and examples of research papers, both related and unrelated to computer science. Bit by bit, I began to understand their structure and purpose, and how research helps connect existing knowledge with new perspectives. This process made research feel less like a mystery and more like a skill I could learn.

Right from Unit 1, I already had a research topic in mind, which gave me a sense of direction. One of the best parts of this module was that we were required to submit early outlines and receive tutor feedback before completing the final summative assessments. This approach really helped me build confidence. It gave me space to experiment, make mistakes, and improve based on constructive feedback rather than starting over from scratch.

Initially, I wanted to include everything I found interesting, but through the module tutor Diego's guidance and feedback, I learned that good research is not about covering everything, but about focusing deeply on one idea. His comments on what was missing and what could be improved helped me think more critically about my writing and the way I presented my arguments.

Another significant learning experience in this module was the forum discussions. These were among the most engaging of all my MSc modules, particularly because they focused on ethical considerations in professional practice. They made me reflect on how often ethics is overlooked in both personal and professional contexts, and how structured discussion and formal education can help raise awareness. Reading my peers' perspectives expanded my understanding and encouraged me to consider ethical implications more thoughtfully in my own work.

Now what?

This module has laid a strong foundation for my dissertation. Although we did not conduct actual research during the module, the skills and knowledge I gained will be directly applicable. I now feel much better prepared for the demands of a longer, more detailed research project. With the dissertation ahead, I feel that the initial uncertainties I experienced have been replaced by a sense of familiarity. I now have a clear idea of what is expected and how to approach each stage systematically.

The worksheets in this module were not something I particularly enjoyed working on. At times, they felt repetitive and unclear, and I struggled to see their purpose in the context of the overall module. I wish these exercises had been taught more explicitly, as it would have given me a better understanding of what we were doing and why it mattered. Despite this, I recognise that depending on the research methodology I choose for my dissertation, I may still need to work with similar worksheets.

Beyond the technical and academic skills, this module has also strengthened my ability to work independently, manage my time effectively, and critically evaluate my own progress. I have learned that reflection, feedback, and iterative improvement are not just module requirements but essential habits for any researcher. As I move into the dissertation phase, I plan to carry forward these practices, keeping a structured record of my progress, seeking feedback when needed, and maintaining a reflective approach throughout.

References

Rolfe, G. *et al.* (2001) *Critical Reflection for Nursing and the Helping Professions: A User's Guide*. London: Palgrave Macmillan.