
## *School of Computing, Engineering, and the Built Environment*
## Edinburgh Napier University MRes

**Application instructions:**
Detailed instructions are available at :
https://www.napier.ac.uk/research-and-innovation/doctoral-college/how-to-apply

# Project details

**Supervisory Team:** tbc

**Subject Group:** Applied Informatics

**Funding status:** Self funded

**Project Title:** MRes research degrees in Applied Informatics

**Applied Informatics Research Opportunities:**

The Applied Informatics Subject Group at Edinburgh Napier University is at the forefront of research in computational intelligence, software engineering, data science, and human-computer interaction. Our research aims to address real-world challenges by developing innovative digital solutions that enhance efficiency, security, and user experience across various industries. We are committed to interdisciplinary collaboration and industry engagement to ensure our research has tangible impacts on society and business.

**Research Areas in Applied Informatics:**

**Artificial Intelligence and Computational Intelligence:** We explore cutting-edge AI techniques, including machine learning, neural networks, and evolutionary computing. Our research applies AI to areas such as natural language processing, predictive analytics, and intelligent automation.

**Data Science and Big Data Analytics:** Our work focuses on extracting meaningful insights from large datasets, improving data-driven decision-making, and developing scalable solutions for handling complex information in fields such as healthcare, finance, and smart cities.

**Software Engineering and Cybersecurity:** We develop robust, secure, and efficient software systems, focusing on agile development, cloud computing, and cyber

resilience. Our research also addresses secure software design, threat detection, and data privacy.

**Human-Computer Interaction (HCI):** We investigate user experience (UX) design, usability engineering, and accessibility in digital systems. Our research aims to create intuitive, user-friendly interfaces and enhance interactions between humans and technology.

**Internet of Things (IoT) and Smart Systems:** We explore the integration of IoT devices, edge computing, and smart infrastructure to enhance automation, connectivity, and efficiency in industries such as transportation, healthcare, and energy management.

**Blockchain and Distributed Systems:** Our research delves into the applications of blockchain technology for secure transactions, digital identity, and decentralised applications, ensuring data integrity and trust in digital systems.

**Our Commitment to Research Excellence:** Our research in Applied Informatics is driven by real-world applications, ensuring that our work contributes to technological advancements that improve business operations, digital security, and user engagement. We actively collaborate with industry partners, policymakers, and academic institutions to translate research into innovative solutions.

We welcome prospective students and researchers interested in contributing to these dynamic fields. Whether your focus is on AI, cybersecurity, data science, or digital innovation, our research community offers a supportive and cutting-edge environment to drive technological progress.

For further information or to explore research opportunities, please visit our **Applied Informatics** research page at Edinburgh Napier University.

## Candidate characteristics

**Education:**
A first degree (at least a 2.2) ideally in Applied subject areas

**Essential attributes:**

- Experience of fundamental Applied Informatics subject related knowledge
- Competent in literature review, report writing and statistical and/or qualitative analysis
- Knowledge of research topic proposed
- Strong motivation, with evidence of independent research skills relevant to the project
- Good written and oral communication skills
- Good time management