
## *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:** Computer Science

**Funding status:** Self-funded

**Project Title:** MRes research degrees in Computer Science

**Computer Science Research Opportunities:**

The Computer Science Subject Group at Edinburgh Napier University is dedicated to advancing knowledge and innovation in computing, driving technological progress, and addressing real-world challenges in an increasingly digital society. Our research spans artificial intelligence, cybersecurity, software engineering, data science, and beyond. Through interdisciplinary collaboration and industry engagement, we aim to develop cutting-edge solutions that impact businesses, communities, and global digital transformation.

**Research Areas in Computer Science:**

**Artificial Intelligence and Machine Learning:** We investigate advanced AI techniques, including deep learning, reinforcement learning, and natural language processing. Our research explores applications in automation, robotics, and decision-making systems.

**Cybersecurity and Digital Forensics:** Our work focuses on enhancing cyber resilience, threat intelligence, and forensic investigation techniques. We develop secure communication protocols, intrusion detection systems, and solutions for mitigating cyber threats.

**Data Science and Analytics:** We leverage data-driven methodologies to extract insights, improve decision-making, and develop predictive models across various domains, including healthcare, finance, and smart cities.

**Human-Centric Computing and Interaction:** We explore human-computer interaction (HCI), user experience (UX) design, and accessibility to create intuitive and inclusive digital systems that enhance usability and engagement.

**Cloud Computing and Distributed Systems:** Our research examines scalable computing architectures, virtualisation, and edge computing to optimise resource management, storage, and processing in cloud environments.

**Blockchain and Cryptography:** We study secure and decentralised computing solutions, focusing on applications of blockchain technology, cryptographic protocols, and distributed ledger systems in finance, supply chains, and digital identity.

**Software Engineering and Development:** We explore agile methodologies, DevOps practices, and software optimisation techniques to enhance the efficiency, reliability, and maintainability of modern software applications.

## Our Commitment to Research Excellence

Our research in Computer Science aligns with industry needs and technological advancements, ensuring real-world impact through innovation and collaboration. We work closely with industry partners, policymakers, and research institutions to develop transformative solutions that drive the future of computing.

We welcome prospective students and researchers interested in contributing to these dynamic fields. Whether your focus is on AI, cybersecurity, software engineering, or cloud computing, our research community provides a supportive and innovative environment for cutting-edge discoveries.

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

# Candidate characteristics

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

**English language requirement**
IELTS score must be at least 6.5 (with not less than 6.0 in each of the four components). Other, equivalent qualifications will be accepted. Full details of the University's policy are available online.

**Essential attributes:**

- Experience of fundamental Computer Science 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