



Professional Education for Law Enforcement & Industry

- MSc Forensic Computing and Cybercrime Investigation (LE)
- MSc Cybersecurity

Rupert Bowen, International Postgraduate Liaison Officer, UCD School of Computer Science

Marco van Bergen, UCD graduate: MSc in Forensic Computing and Cybercrime Investigation



Rupert
Bowen



Marco van Bergen



Agenda

- Vorstellung University College Dublin (UCD)
- Studiengang „MSc Cybersecurity“
- Studiengang „MSc Forensic Computing and Cybercrime Investigation (LE)“
- Eigene Erfahrungen

133 hectares

of modern
parkland
campus





UCD School of Computer Science





About UCD



**Leader in
sustainability**



Rankings Success

5 subjects in top 50
18 subjects in top 100
118th in world ranking
3 years of improvement

41,043

students



5,930 study in overseas operations

13,016 non-Irish nationalities

9,012 non-EU fee students



Ireland's Global University

39% international staff

510 global partner institutions

155 student nationalities

5 global centres

3 joint international colleges
in China

343,000 alumni across

184 countries



anabin

Das Infoportal zu ausländischen
Bildungsabschlüssen

UCD is listed on the KMK ANABIN database as H+
(<https://anabin.kmk.org/db/institutionen>)

UCD School of Computer Science

- **200 staff including 71 academic staff**
- **1,700 students at Undergraduate (HDip, BSc) and graduate level (MSc, PhD)**
- **World-class graduate employability ~ 84% for BSc graduates, with further 9.6% engaged in further study.**
- **Research strength in AI/Data Science, Cybersecurity, Next Generation Networks and Software Engineering**

UCD Centre for Cybersecurity & Cybercrime Investigation

Research, consultancy,
software development,
training & education.

www.ucd.ie/cci/



University College Dublin
Ireland's Global University



EU-funded projects www.ucd.ie/cci

"Helping Law Enforcement, Government and Industry in the fight against cybercrime"



FREETOOL

Free digital forensic tools for LE



UNDERSERVED

Cyber Threat Reporting Platform for the humanitarian sector.



INSPECTr Intelligence Network and Secure Platform for Evidence Correlation and Transfer.

CYCLOPES build and maintain an innovation-driven network of European law enforcement agencies combating cybercrime.



ILEAnet Building a practitioner network community for sharing challenges, knowledge and understanding.



University College Dublin
Ireland's Global University

HOPLITE Enables law enforcement agencies to identify and prioritise online threats in real time.



UCD MSc Cybersecurity

- **Part-time over 2 years**
- **Designed for professional learners**
- **Flexible study via distance learning**
- **Recorded lectures**
- **Workshops in Dublin 8x per year**
- **Research options**

- Goal: Preparing IT professionals for a variety of cybersecurity roles

MSc Cybersecurity - typical student

Working full time as:

software, security and network engineer

incident response

cyber threat intelligence analyst

Security Analyst (SOC)

security & risk advisor

digital forensics and eDiscovery consultant

IT Manager / IT Security / CIO

government/law enforcement officials

Average - 6 years
work experience in
IT (range from 6
months to 15
years)

from Ireland,
Austria, Cyprus,
Greece, Spain, UK,
Denmark, Finland,
Netherlands,
Georgia, Turkey

2 paths to a Masters

A. 11 courses & case study

90 credits Taught Masters

75 CREDITS

Taught modules
plus
a **15 credit**
Case Study

or

60 CREDITS

Taught modules
plus
a **30 credit**
Professional
or
Research Project

Core Modules

- Information Security
- Leadership In Security
- Risk Assessment & Standards
- Cybersecurity Law and Regulation
- Secure Software Engineering
- Applied Cryptography
- Network Security
- Incident Response

Option Modules

- Malware Analysis
- Security Research Trends
- Ethical Hacking
- Case Study
- Professional Project
- Research Project

2 paths to a Masters

B. 8 courses and a Research Project

90 credits Taught Masters

75 CREDITS

Taught modules
plus
a **15 credit**
Case Study

or

60 CREDITS

Taught modules
plus
a **30 credit**
Professional
or
Research Project

Core Modules

- Information Security
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- Risk Assessment & Standards
- Cybersecurity Law and Regulation
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Option Modules

- Malware Analysis
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- Case Study
- Professional Project
- Research Project

MSc in Forensic Computing & Cybercrime Investigation



1700 graduates in 77 countries

Master's (MSc) in Forensic Computing & Cybercrime Investigation

International education programme for law enforcement (LE)

Designed for LE investigators

Part-time

Expert lecturers from LE and academia

Distance-learning

Running for 20 years

Exams in Dublin,

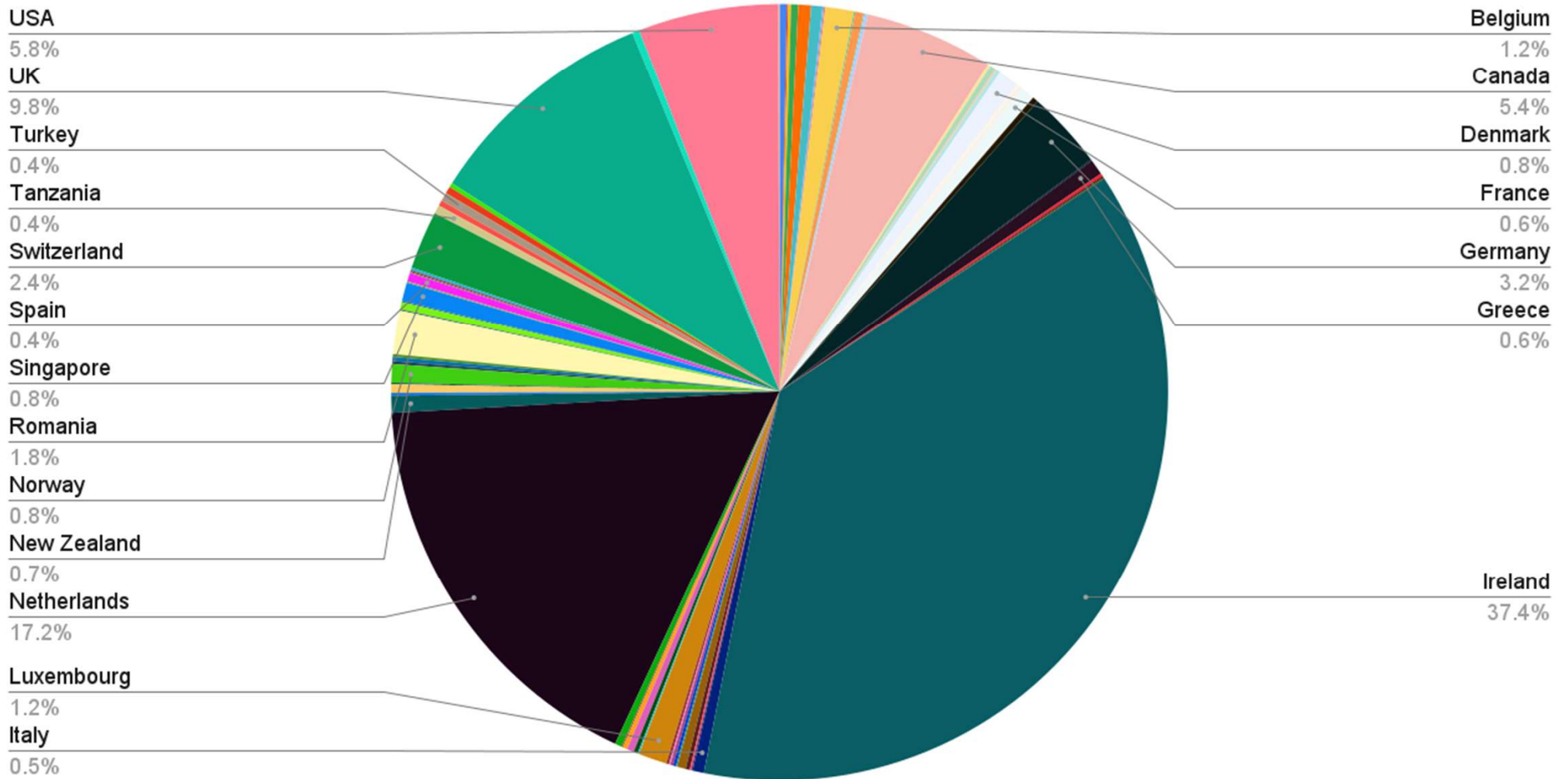
Netherlands and Hong

Big choice of modules

Kong

Students and graduates from 77 countries

Your international law enforcement network



Germany
64 students
6 current



Switzerland
42 students
10 current

Austria
10 students
0 current

Class Statistics
2025-2026:
205 students
from 22
countries

Country		
Australia	Hong Kong	Spain
Azerbaijan	Ireland	Switzerland
Belgium	Italy	Tanzania
Bulgaria	Lebanon	Thailand
Canada	Luxembourg	UK
Germany	Netherlands	USA
Greece	Portugal	

Teaching Team

UCD Lecturers

Associate Professor **Nhien-An Le-Khac (Programme Director)**

Professor **Chris Bleakley**

Professor **Joe Carthy**

Assistant Professor **Ranul Thantilage**

Dr. **Jack Nicholls**

Dr. **Ray Genoe** (Director UCD Centre for Cybersecurity & Cybercrime Investigation)

Mr. **Gerry Buttner**

Industry & Law Enforcement Lecturers

Mr. **Mick Moran** (CEO Hotline Ireland)

Mr. **Pat Morrissey** (An Garda Síochána / Irish police service)

Prof. **Darren Hayes** (Pace University, NY, USA)

Mr. **Barry Grundy** (Federal Law Enforcement, USA)

Mr. **Alwin Hilberink** (Dutch Police Academy)

Mr. **Dennis in den Berken** (Dutch Police Academy)

Mr. **Gavin O Gorman** (Microsoft)

Dr. **Aditya Kuppa** (Mirror Security)

Mr. **Paul Galanthay** (Geneva Police, Switzerland)

+8 Teaching Assistants



18 courses plus research options

Investigations strand

Network Investigations
Malware Investigations
Advanced Malware Analysis & Threat Intelligence
VoIP and Wireless Investigations
OSINT Collection & Analysis
Online Child Abuse Investigations
Financial Investigation Techniques - *Following the Money*

Forensics strand

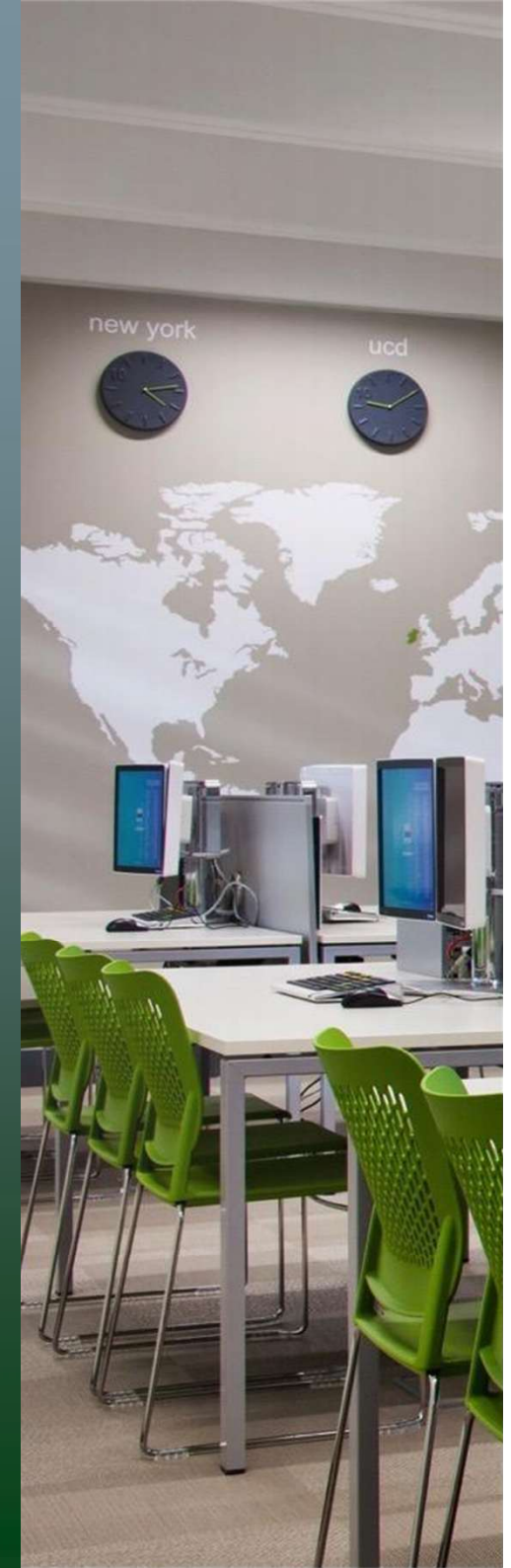
Computer Forensics
Programming for Investigators
Mobile Devices Investigation
Live Data Forensics
Linux for Investigators
Advanced Computer Forensics
Data and Database Forensics

New AI modules

AI Security: Offensive, Defensive, and Operational Best Practices
Artificial Intelligence Forensics and Investigations

Optional research modules

Case Study (10 credits)
Research Project (30 credits)



Student Research Projects

International academic conferences - ADFSL, IEEE, DFRWS, ICDF2C, IFIP

- Forensic Analysis of the Google Pixel Watch
- Finding Forensic Artefacts in Long Term Frequency Band Occupancy Measurements using Statistics and Machine Learning (ICDF2C)
- Identify Users on Dating Applications: A Forensic Perspective (ICDF2C)
- Accessing secure data on Android through application analysis ICDF2C)
- Retracing the Flow of the Stream: Investigating Kodi Streaming Services (ICDF2C)
- Forensic Analysis of E-Dating Applications based on iPhone Backups (IFIP)
- Mobile Payment Forensic Analysis of Apple Pay on iOS (DFRWS)
- Machine Learning Based Approach to Analyze File Meta Data for Smartphone File Triage (DFRWS)
- Forensic Analysis of Artifacts in the Matrix Protocol and Riot.IM application (DFRWS)
- Perceptual Colour-based Geolocation of Human Trafficking Images for Digital Forensic Investigation

Meine Erfahrungen

- Englische Sprache
- Praxisorientiert
- Ansprechende Aufbereitung der Lehrmaterialien
- Modulwahl sehr frei möglich
- Berufsbegleitend über zwei Jahre anstrengend aber machbar
- Internationales Netzwerk
- Anerkannt bei Europol





Ask me a question

Type something...

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www.ucd.ie/cs