



University College Dublin  
Ireland's Global University

## MSc Forensic Computing & Cybercrime Investigation (Distance Learning)

(1 Year Full Time or 2 Years Part Time)

This is a programme for law enforcement. It aims to provide high quality forensic computing and cybercrime investigation training and formal education. It is also designed to deliver cutting-edge, up-to-date cybercrime investigation techniques, strategies and tactics that allow students to understand and tackle emerging trends in cybercrime. Over the past 10 years we brought in specialists from around the world to review and advise on the content considering the needs of digital forensic investigators and computer crime specialists. The UCD School of Computer Science (CS) and UCD Centre for Cybersecurity and Cybercrime Investigation (CCI) are working closely with law enforcement agencies and industry practitioners in seeking solutions to technologies-related crime. CS and CCI staff also collaborate with the scientists from European Cybercrime Training and Educational Group at Europol (ECTEG) to work on applied research and developing forensic tools and then to transfer high impact research achievements and efficient, free forensic tools to the law enforcement community. This programme is delivered by experienced academics from CS and CCI and also by experts who are leaders, managers and heads of forensic departments in law enforcement agencies and in industry.

A wide range of modules is available at beginner and advanced levels.

On successful completion of the programme, depending on the module taken, students should be able to:

- Understand methods used to conduct forensic analysis of digital devices including computer systems and mobile devices
- Identify, collect, process, analyse and present digital forensics evidence
- Use common network investigation techniques
- Develop critical thinking in analysing and performing cybercrime investigation
- Research and develop custom tools for evidence analysis
- Work in groups to resolve computer forensic challenges
- Understand the cybercrime business model and how to perform financial fraud investigations
- Conduct research into novel forensic and cybercrime investigation problems
- Investigate cases of child sexual exploitation on the Internet
- Tackle the forensic analysis of future technologies (both hardware and software) through the development of new applications

## Why study at UCD?



### Tradition

Established 1854, with 160 years of teaching & research excellence



### Global profile

UCD is ranked in the top 1% of higher education institutions worldwide



### Global community

Over 6,000 international students from over 120 countries study at UCD



### Global careers

Degrees with high employability; dedicated careers support; 1 year stay-back visa



### Safety

Modern parkland campus with 24 hour security, minutes from Dublin city centre

## Course Content and Structure

90 credits taught masters	90 credits taught modules	80 credits taught modules and a 10 credit case study	60 credits taught modules and a 30 credit research project
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Lectures are pre-recorded and provided online via a virtual online learning environment, allowing you to participate from your home or office and attend UCD only for examinations each year in Dublin, the Netherlands or the USA.

### Core Modules

MSc candidates are encouraged to take the following modules in their first year:

- Computer Forensics
- Network Investigations

### Optional modules include:

- Financial Investigation Techniques – Following the Money

- Legislation
- Financial Fraud Investigation
- Online Fraud Investigations for Irish Law Enforcement
- Programming for Investigators
- Malware Investigations
- Mobile Device Investigations
- Live Data Forensics
- Linux for Investigators
- Advanced Scripting
- VoIP and Wireless Investigations
- Open Source Intelligence
- Investigation of Sexual Abuse of Children on the Internet
- Case Study
- Research Project
- Advanced Computer Forensics
- Data and Database Forensics
- Advanced Malware Analysis

## Key Fact

To date, over 600 law enforcement officers from agencies in 58 countries have studied on the programme. This is the only university Masters programme in this area designed exclusively for – and restricted to – law enforcement.

Modules and topics shown are subject to change and are not guaranteed by UCD.

## Career Opportunities

For law enforcement officers, having this qualification has the additional advantage of adding credibility to their testimony as expert witnesses. Career development possibilities in this field are excellent. Graduates include senior staff at Europol and INTERPOL, members of national and regional police forces and police training colleges, government ministries and agencies with LE powers, defence forces, specialist cybercrime agencies, revenue, customs and border protection.



## Apply Now

This programme receives significant interest so please apply early online at [www.ucd.ie/apply](http://www.ucd.ie/apply). There are student intakes in January and September.

## Entry Requirements

- This programme is restricted to LAW ENFORCEMENT (LE) ONLY. Applicants must be working in an investigative role in an organisation that has responsibility for the enforcement of national or local legislation, including police; revenue & customs, border security, military, etc.
- Applicants to the MSc / Grad. Diploma / Grad. Certificate programme must have five years' experience in LE
  - OR
  - A degree in computing / policing studies / related discipline
  - OR
  - Two years' LE experience in Digital Forensics / Cybercrime Investigation
  - OR
  - Have completed three modules with average grade, B- or above
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.

## Graduate Profile

### Victor Völzow, Operational Forensic analyst in Polizei Hessen, Germany

It's a fantastic opportunity to meet international colleagues and have academic training that is unique in the world. That's very special for us. Colleagues on this study course have already helped me with my own investigations. We also share information on the structure of units and how we can all improve.

## Graduate Profile

### Cindy Murphy, Detective, WI Police Department, USA

I found the collaboration with international law enforcement one of the most useful aspects of the course. I believe that the MSc is a great credential for court, and for my professional future. My dissertation has been published in a peer-reviewed journal and has generated interest for other papers, a book chapter and international speaking opportunities. Attending UCD provided an opportunity for my work to be noticed, and to begin to make a difference, on an international level.

## Fees

Tuition fee information is available on [www.ucd.ie/fees](http://www.ucd.ie/fees).

## Additional Course Delivery Options

- As well as the MSc, there are Graduate Diploma, Graduate Certificate and single module options.
- There is also a January or September start.

## Related Masters Programmes of Interest

- MSc Digital Investigation & Forensic Computing

## EU Enquiries

✉ : [cci.info@ucd.ie](mailto:cci.info@ucd.ie) ☎ : +353 1 716 2947  
[www.ucd.ie/courses/msc-forensic-computing-cybercrime](http://www.ucd.ie/courses/msc-forensic-computing-cybercrime)  
 Centre for Cybersecurity & Cybercrime Investigation, University College Dublin, Belfield, Dublin 4.

## Non-EU Enquiries

✉ : [internationaladmissions@ucd.ie](mailto:internationaladmissions@ucd.ie)  
[www.ucd.ie/international](http://www.ucd.ie/international)