Postgraduate Diploma in Science in Cybersecurity
(Classroom delivery)

Location: IFSC Campus

Start Date: The course is expected to start in the week commencing 20th January 2020

Indicative Schedule: Tuesday, Thursday 18.00 - 22.00 and every Saturday 09.00 - 16.00.

Career Bridge classes will be delivered one day per week 17.00 start – day to be confirmed.

Duration: 1 year, 3 semesters. January to May, late May to August and September to December 2020.

Applications: Apply online at www.springboardcourses.ie

Fees: A student contribution fee of €695 is applicable if you are in employment. No fees applicable if you are unemployed. The scheme does not cover any allowance for books and materials.

If a student contribution fee is applicable this must be paid in full no later than Friday 13th March 2020

Course Description
Cybersecurity is an essential need for a modern society in which information technology and services pervade every aspect of our lives. The Cybersecurity field has the fastest growth rate while the labour market encounters a severe workforce shortage. As a graduate of the course you will be able to:

· Conduct independent research and analysis in the cybersecurity domain including secure application design, development and testing within a given context e.g. web, cloud computing, and forensic investigation
· Demonstrate practical skills and expert knowledge of technologies and tools that support cryptanalysis, application and service vulnerability detection and patching, security incidents detection and log file analysis
· Critically evaluate the design and implementation and evaluation of a research idea
· Analyse and evaluate the legal, ethical and economic ramifications of developing secure applications and services
· Communicate effectively to a range of audiences in both written and verbal media and undertake self- learning in order to acquire new knowledge

Career Prospects
Cybersecurity Ventures estimated that cybercrime damages could amount to as much as $6trn by 2021. According to Michael Shanahan, CEO of IDA Ireland, "the cyber security industry in Ireland is growing at an unprecedented rate and we believe Ireland is uniquely placed to benefit from increased global investment to position itself as a world class cyber security cluster."

Growth is driven by the rapid rise of the internet of things (IoT), bring your own device (BYOD) and artificial intelligence, each of which exposes a company and their data to costly breaches (www.hays.ie).

Who is the course for?
This course is ideal for ICT professionals or graduates with a level 8 degree on National Framework of Qualifications (NFQ), in computing/ computer science or in a cognate area (STEM) that wish to develop a career as a cybersecurity professional; to take a leading technical or managerial role; to progress faster in their employment or to apply the knowledge in their current role. Candidates who do not hold a computing degree and are currently working in the IT sector may be considered based on relevant academic qualifications or extensive work experience. Candidates are expected to have programming ability.

Award and Progression
Graduates of the Postgraduate Diploma in Science in Cybersecurity who are awarded an NFQ Level 9 qualification can optionally complete the additional 30 credits required to upgrade their qualification to the MSc in Cybersecurity (Not included under Springboard+, additional fee would apply).

Academic Entry Requirements
A minimum of a level 8 (honours degree) qualification (2.2 or higher) or equivalent on the National Qualifications Framework in Computing or a cognate area. Candidates from a non-cognate background are eligible to apply for this programme and are assessed by NCI's Recognition of Prior Learning process meaning applicants who do not meet the normal academic entry requirements, may be considered based on relevant work or other experience. Non- English speaking applicants must demonstrate fluency in the English language as demonstrated by IELTS academic score of at least 6.0 or equivalent.

Laptop Requirements
This programme has a BYOD (Bring Your Own Device) policy. Specifically, students are expected to successfully participate in lectures, laboratories and projects using a portable computer (laptop/notebook) with a substantial hardware configuration. Its minimal suitable configuration is 8GB of RAM (16GB are recommended); a modern 64-bit x86 multi-core processor (Intel i5 or superior); 250+ GB of available space in hard disk; WiFi card; and a recent version of Ubuntu, macOS, or Windows.

It is the responsibility of each student to ensure her/his computer is functioning correctly and that she/he has full administrator rights. NCI IT cannot provide support for these personal devices

Assessment
The programme is assessed by means of continuous, in-semester, assessment and final examination. http://courses.ncirl.ie. Please note that in some instances exams may take place in the daytime and at weekends.

Course Content

The course offers two specialisations: Forensics and Cloud Security. Learners must select one specialisation.

Year 1 / Semester 1
· Security Fundamentals
· IT Law and Ethics
· Network Security and Penetration Testing
· Career Bridge

Year 1 / Semester 2
· Secure Programming for Web
· Cryptography
· Malware Analysis
· Career Bridge

Year 1 / Semester 3
· Research in Computing
· Secure Programming for Application Development
· Cloud Security
  - *Cloud Security Elective*
· Incident Response and Analytics
  - *Forensic Elective*
· Forensics and eDiscovery
  - *Forensics Elective*
· Career Bridge

Relevant Employment / Placement can be undertaken within the course timeline, generally 2nd or 3rd semester, or commenced within 3 months of course completion.

*Note that all modules count towards the final award classification.

Why Choose NCI
NCI has almost 70 years' experience working with part-time students. All programmes under Springboard+ are accredited by QQI, so they are recognised nationally and internationally.

The College provides a supportive environment and tailored facilities for students returning to education after a number of years. In particular for Springboard+ a dedicated programme leader will look after the organisation of your course and make sure all your needs are met.

All our programmes are practical and are delivered by industry experts.

We benefit from a convenient location with the LUAS just outside the door and we are minutes from Connolly Station. Career Bridge, Work Placement, industry based projects and a dedicated team of career development professionals will work with you to help you gain the most from your qualification and get back into the workforce, or develop your career.

Laptop and Internet Access Requirements
It is the responsibility of the student to ensure they have a computer device of sufficient specification to complete their course and adequate internet access. Please check the course listings for specific info

Restrictions Regarding Previous Participants
1. Participants may not enroll in more than three courses in any five-year period. They may re-engage with the Springboard+ programme after a break period of two years. This criteria will be strictly enforced.

2. Participants who enrolled in more than one Springboard+ course since the inception of Springboard in 2011, and did not complete any course, are not eligible to apply in 2019. This criteria applies to all categories of applicant outlined below.

3. Participants who enrolled in more than one Springboard+ course since the inception of Springboard in 2011, and did not complete any course, are not eligible to apply in the 2019 funding year.

4. All applicants must meet the eligibility criteria outlined for the target cohorts and any additional requirements as outlined by the course provider.

Eligibility for Funding
Fees: The Springboard+ scheme allows for 100% funding of the tuition cost of these programmes if you fall into one of the below categories

- Unemployed and in receipt of an eligible DEASP payment or signing for credits
- Returners

For those in employment a student contribution fee is required. This is payable by the participant and must be paid in full by 13th March 2020. The fees quoted are the student contribution for the full course. These can be paid on the NCI website, see www.ncirl.ie/NewStudents for details. Applicants can also have their employer fill out a sponsorship form indicating the employer's commitment to pay the student contribution element. Completed sponsorship forms should be returned to fees@ncirl.ie within two weeks of accepting your place on the course.

Returners and employed applicants: Will be required to meet nationality and residency requirements for Springboard+ courses. Please see 'Springboard+ Participant Eligibility' at www.springboardcourses.ie/faq for more information. 'Returners' are defined as people that have been out of the work environment for a number of years due to childcare or other caring obligations and have a previous history of employment but may require upskilling, reskilling or cross-skilling to transition back to the workforce. More information can be found at 'Am I Eligible for a Springboard+ Course' at www.springboardcourses.ie/eligibility

Two year part-time courses: If you are unemployed and in receipt of a jobseekers payment (including Farm Assist and Qualified Adults of Working Age) you are not eligible for the two year ICT Conversion Courses. Please see www.springboardcourses.ie/eligibility.

Level 9 Postgraduate Courses: This year these courses will be opened to both the employed and the unemployed however NCI must prioritise those in receipt of a social protection payment and those as 'returners' so that they can upskill and reskill and re-enter the workforce. Therefore, a number of places will be reserved for these on our Level 9 postgraduate courses. Please note that to participate in NFQ Level 9 (postgraduate) course, a period of at least one year must have elapsed since completing a full time undergraduate degree course leading to a major award at level 8 on the NFQ.

Unemployed applicants must be Department of Employment Affairs and Social Protection (DEASP) customers and in receipt of an eligible DEASP payment, signing for social insurance contribution credits or be previously self-employed to be eligible for a funded place on a Springboard+ programme.

Application
Please feel free to contact us on 1850 221 721 (Option 4) to enquire about an application. Alternatively you can email springboard@ncirl.ie. We are not permitted to accept applications directly from candidates as all Springboard and ICT Skills applications must be made online through www.springboardcourses.ie. Please note that all applicants must meet NCI's academic admission criteria for any courses and as per previous years all courses and specialisations run subject to numbers. Eligibility for funding does not infer eligibility for this course.

Places Available:
Demand for these courses is expected to exceed the number of available places. Places will be offered on a first come first served basis for eligible applicants. Decisions are communicated through www.springboardcourses.ie. If you do not meet the normal academic entry requirements please do not delay in applying as you may be required to submit additional documentation and/or participate in an interview. A cut-off date for applications will also apply and this will be posted on the www.springboardcourses.ie website when you make an application to NCI.

Department of Social Protection Payments
We advise that all payment queries should be addressed to your local Intreo, Social Welfare Office to confirm continuation of a Social Protection payment.

More information can be found at 'Social Protection FAQs' www.springboardcourses.ie/faq

Course Funding in the Event of Obtaining a Job
Should you obtain a job during your course of study the funding will remain in place for the duration of your course. The timing of the classes is aimed to allow people to work and study at the same time. If you do gain employment during the course please contact us to see how we can best facilitate you completing your course. If you do not qualify under Springboard+ you may apply directly to National College of Ireland for our fee paying courses at admissions@ncirl.ie

For Further Information Contact
Tel: 1850 221 721 (Option 4)
Web: www.ncirl.ie
Email: springboard@ncirl.ie