Department of Computer Science

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Cybersecurity (MSc)

June 3, 2019

Overview

In the technology landscape, where jargon and acronyms occur and change frequently, the term cybersecurity has grabbed a lot of attention. The International Telecommunication Union (ITU) refers to cybersecurity as – 'Cybersecurity is the collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment and organization and user's assets.'

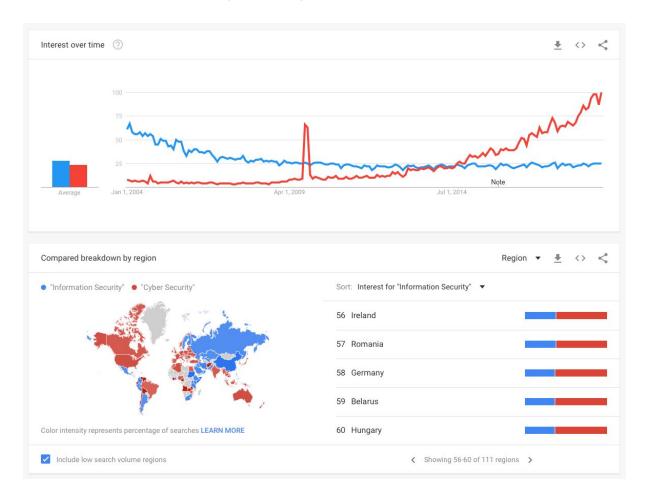
Professionals, enterprises and even nations seem to focus on the term cybersecurity today instead of information security. In the IT industry and in academia, people have started to use the terms information security and cybersecurity synonymously and this can confuse prospective students who may be interested in enrolling in the MSc in Information Security at Cork Institute of Technology.

The Integrated Network on Cybersecurity (<u>SERENE-RISC</u>) Canada website compiled a report in 2015 of all the courses offered on the topic of security in a broader sense by Canadian universities. In <u>this report</u>, they are treating all the security related courses under the term of cybersecurity.

After much debate, the MSc in Information Security Programme Board is recommending to Academic Council a title change for this programme. The new proposed title is the MSc in Cybersecurity.

Google Trends - Information Security/Cybersecurity

The results from Google Trends below indicates that search queries for "Information Security" (colour blue) are declining while search queries for "Cybersecurity" (colour red) are increasing in the USA and Europe. These results also support the move to rename the programme title to the MSc in Cybersecurity.



Google Trends is a website by Google that analyzes the popularity of top search queries in Google Search across various regions and languages. The website uses graphs to compare the search volume of different queries over time.

Expert Feedback

Feedback form a number of key experts was sought and the all were supportive of the proposed title change. Please see the individual responses below.

1. Bob McArdle, Director FTR - Cybercrime Research at Trend Micro

"Its looks like CyberSecurity has been the <u>term of choice</u> since around 2015. Some countries like China prefer the name Information Security, but the majority of the western world uses Cyber Security."

2. Dr An Lekac, External Examiner, MSc in Information Security

"I totally agree with the new programme name."

3. Glenn Attridge, Head of Cyber Defence & Security Response at RBS

"Yes, I think it is an sensible change in light of the way that industry is treating he two subjects."

4. Eoin Carroll, Security Researcher at McAfee

"Completely agree with title change - information security is very process sounding and cyber security definitely more technical."

5. Ciaran Luttrell, Director of Service Operations at eSentire

"I think Cybersecurity is more fitting. If people ask us what industry we work in or what our company does, I would tell them Cybersecurity rather than Information Security."

6. Máirtín O Sullivan, Site Security Lead, Amazon Web Services

"I would agree that cyber security is becoming more generally acceptable, and as such making the change wouldn't diminish the perception of the course and for wider non-tech organizations would be seen as an indication that it's more up to date, etc (even if that's just perception)."

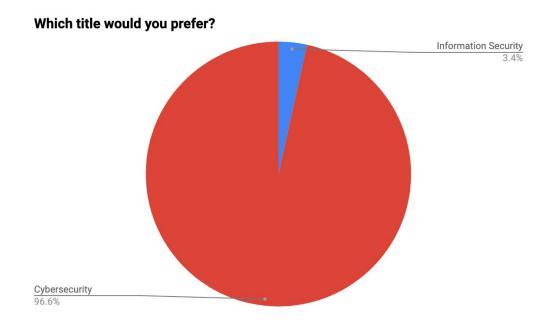
Student Survey

Students from both the current full-time and part-time online MSc in Information Security programme were asked to complete the following online survey.

After much debate, the MSc in Information Security Programme Board is recommending to change for this programme. The new proposed title is the MSc in Cybersecurity.	Academic Council a title
The reasons for this proposed change is that we have observed that the term 'cybersecurity in the security industry and that it may be a more attractive title for prospective students. Al informed us that 'Information Security' is nowadays seen as more dealing with Compliance, etc. (what we would have called 'Security Management').	lso, industry experts have
Please let me know your thoughts on the proposed change by completing the form below.	
Personal Details	
Please answer the following sections.	
Surname	*
Short-answer text	
First Name	*
Short-answer text	
Which title would you prefer?	*
MSc in Cybersecurity	
MSc in Information Security	
Any concerns or questions about this proposal?	*
Long-answer text	

Student Survey Results

A total of 29 students completed the survey, all but one were in favour of the name change. The results of the survey are presented below along with some comments from respondents.



- I think it is a great idea. It's great to hear you are being proactive in keeping these courses relevant.
- I'm happy with the change.
- I agree, the modules are more aligned with a speciality in Cyber Security field.
- No concerns. I am full time IT professional working in HPE Global Cybersecurity. The new title reflects the current lingo in the area, both the Irish org, but across pan HPE.
- I would agree with all the reasons above. It is more acceptable in the security industry and is a more attractive title.
- No concerns, agree.
- Good idea.
- I prefer my degree to be MSc Cybersecurity.
- It should be Cybersecurity.
- I agree with the name change. I already tell people I am doing a Cybersecurity MSc because no one understands what Information Security means.
- I think it's a good idea as 'Information Security' is kind of vague.

- Cybersecurity will stand out more.
- Makes sense, I would rather have the MSc in Cybersecurity.
- I think that MSc in Cybersecurity more aligns with the content of the programme.
- I agree that Cybersecurity is more current.
- Cyber security is much better than info security.
- Cybersecurity is more apt, info security is more about governance and control.
- I think cybersecurity would imply more operational white hating where infosec has a more broader implementation.

Change Process

If approved by Academic Council, the title of the programme will change immediately and all paper and online documentation will be updated to reflect this change. Incoming students will be informed of the title change and will be given the opportunity to withdraw and receive a return of any deposits. While this is unlikely to occur, it is a fair and reasonable approach that protects all parties.

It should be noted that current student will have to option to graduate with their preferred title if approval is granted to change the programme title. They will have the option to graduate with the title of MSc in Information Security of the MSc in Cybersecurity.

Tim Horgan

Head of Department

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