



## Doctor of Philosophy with Major in Computer Science: Cybersecurity Concentration

Students in the Ph.D. with Major in Computer Science have the option of pursuing a concentration in Cybersecurity. This major and concentration are available in person and fully online.

### Admission Requirements

Applicants should meet all the admission requirements for the Ph.D. with Major in Computer Science program.

### Degree Requirements

Applicants should meet all the degree requirements for the Ph.D. with Major in Computer Science program. In addition, the following requirements should be met.

1. Graduate coursework counted for the Ph.D. program must contain at least three graduate courses from the table below. These courses focus on theoretical and/or applied cybersecurity. Additional courses may be approved by the dissertation advisor. Graduate courses completed during the master's degree program may also be used to meet this requirement.
2. The student's Ph.D. dissertation research and scholarship must have a strong emphasis on one or more areas of cybersecurity, including but not limited to, applied and/or theoretical areas.

Cryptographic Engineering	CDA 5326	3
Practical Aspects of Modern Cryptography	CIS 5371	3
Computer Data Security	CIS 6370	3
Distributed Systems Security	CIS 6375	3
Secret Sharing Protocols	COT 6427	3
Cyber Security: Measurement and Data Analysis	CTS 6319	3
Cryptocurrencies and Blockchain Technologies	CIS 6730	3
Introduction to Cryptology and Information Security	MAD 5474	3

**From:** Tamara Dinev <tdinev@fau.edu>  
**Sent:** Tuesday, April 4, 2023 8:44 PM  
**To:** Mihaela Cardei <mcardei@fau.edu>  
**Cc:** Hanqi Zhuang <zhuang@fau.edu>  
**Subject:** RE: PhD CS with concentration in Cybersecurity

Hi Mihaela:

ITOM has no objections to creating the concentration.

Best Regards:

Tamara

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Tamara Dinev, Ph.D., Department Chair and Professor  
Dean's Distinguished Research Fellow  
Department of Information Technology and Operations Management, FL 219  
College of Business, Florida Atlantic University  
Boca Raton, Florida 33431  
Google Scholar: <https://scholar.google.com/citations?user=YH8QZ-YAAAAJ&hl=en>

**From:** Mihaela Cardei <mcardei@fau.edu>  
**Sent:** Tuesday, April 4, 2023 2:17 PM  
**To:** Tamara Dinev <tdinev@fau.edu>  
**Cc:** Hanqi Zhuang <zhuang@fau.edu>  
**Subject:** PhD CS with concentration in Cybersecurity

Hello Tamara,

EECS is proposing a new concentration in Cybersecurity to its PhD Computer Science program, please see attached. Please let us know your feedback.

Best regards,  
Mihaela

**From:** Stephen Locke <lockes@fau.edu>  
**Sent:** Monday, April 17, 2023 2:48 PM  
**To:** Hanqi Zhuang <zhuang@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Thank you. I think that should make our group happy.

Stephen

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**From:** Hanqi Zhuang <zhuang@fau.edu>  
**Sent:** Monday, April 17, 2023 2:35 PM  
**To:** Stephen Locke <lockes@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Dear Steve,

Thank you very much for the quick response.

We will place MAD 5474 the PhD program as an elective since the course may be too high level in math for MS ITM.

Best,  
Hanqi

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**From:** Stephen Locke <lockes@fau.edu>  
**Sent:** Monday, April 17, 2023 2:26 PM  
**To:** Hanqi Zhuang <zhuang@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Hanqi,

The only comment I heard from the group is that they might like to have MAD 5474 (or the undergraduate CIS 4362) as a possible elective.

This was just a suggestion, so I am going to say that the department approves of the two programs.

Stephen

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**From:** Hanqi Zhuang <zhuang@fau.edu>  
**Sent:** Monday, April 17, 2023 1:35 PM  
**To:** Stephen Locke <lockes@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Hi Seve,

Please provide any feedback on the proposed MS ITM and PhD tracks so we can move forward with the approval processes.

Best,  
hanqi

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**From:** Hanqi Zhuang <zhuang@fau.edu>  
**Sent:** Tuesday, April 4, 2023 2:50 PM  
**To:** Stephen Locke <lockes@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Thanks

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**From:** Stephen Locke <lockes@fau.edu>  
**Sent:** Tuesday, April 4, 2023 2:21:37 PM  
**To:** Hanqi Zhuang <zhuang@fau.edu>; Edoardo Persichetti <epersichetti@fau.edu>; Shi Bai <sbai@fau.edu>; Veronika Kuchta <vkuchta@fau.edu>; Francesco Sica <sicaf@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Re: Please approve these two program revisions

Thanks. I am forwarding our crypto group for comments.

Stephen

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**From:** Hanqi Zhuang <zhuang@fau.edu>  
**Sent:** Tuesday, April 4, 2023 2:16 PM  
**To:** Stephen Locke <lockes@fau.edu>  
**Cc:** Mihaela Cardei <mcardei@fau.edu>  
**Subject:** Please approve these two program revisions

Dear Steve,

Hope this finds you well.

The EECS department proposes two program changes: one is to add a concentration, Cybersecurity to the MSITM program (jointly with ITOM) and another is to add a concentration to the PhD in CS program. See attached.

Please provide us with your feedback.

Thanks

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