

## DoD Electromagnetic and Cyber Research and Experiential Education

June 16<sup>th</sup> 2023

Information Session

#### **VICEROY DECREE VI**

 Provide robust experiential research and education opportunities to build knowledge, skills, and abilities in DoD-relevant cybersecurity, EMS, data science, cryptography, and strategic foreign languages

Funding for VICEROY Decree provided by the Office of the Undersecretary of Defense for Research and Engineering, in collaboration with the Air Force Research Laboratory and Griffiss Institute



#### **DECREE Virtual Institute Consortium**

- Northeastern University
  - CAE-CD, CAE-CO, CAE-R
  - Army and Navi ROTC
  - BS, Minor, MS and Ph.D
- Northern Arizona University
  - Hispanic Serving Institution (HSI)
  - Army and Air Force ROTC
  - BS, Minor, MS and Graduate Certificate in Cyber
- University of South Carolina
  - Army, Navy, and Air Force ROTC
  - BS in Cyber Intelligence, Concentration and Graduate Certificate in Cyber Operations
- University of Houston
  - Hispanic Serving Institution (HSI)
  - Asian American Native American Pacific Islander Serving Institute (AANAPISI)
  - Army and Air Force ROTC
  - Certificate and MS in Cyber



- Each partner university selects limited number of scholars
- Based on major fields of study
  - Curricular achievements
  - ROTC achievements
  - Marginalized, and/or historically underrepresented students
- Up to \$10,000 scholarships
- Each scholar is required to complete 8-10 credits
  - One course taken at different institution
- Coursework must be completed by Spring 2024



#### Application process

based on VI common criteria & complemented by other criteria at home institution

#### Eligibility Criteria

- Must be undergraduate student enrolled full-time
  - (preferably sophomore or junior)
- Must be security-clearance eligible

#### • Transcript recognition

Institutional recognition after completing VI credits

#### • Graduate students' mentors

- Support on VI curriculum courses
- Career mentorship



- Multi-institution curriculum for all VI students
- Students earn course credits toward their "home degree"
- Courses will follow a virtual instructional method for Visiting VI students
- Course curriculum offer will be based on breadth and depth:

#### **Breadth**

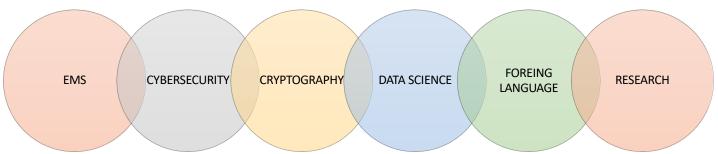
• Courses complement student's background or skills

#### Depth

• Courses amplifying and extending existing student's focus/background

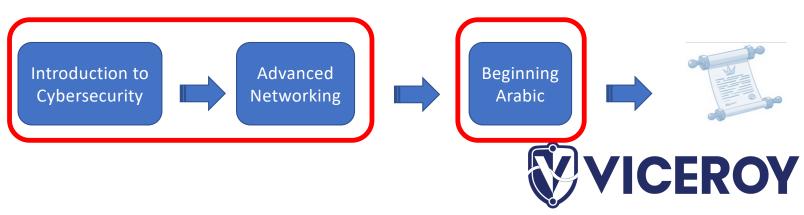


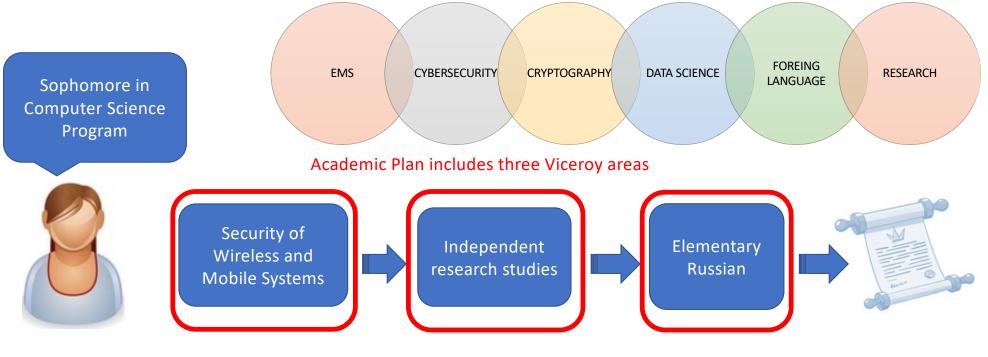
Junior in Electrical Engineering Program



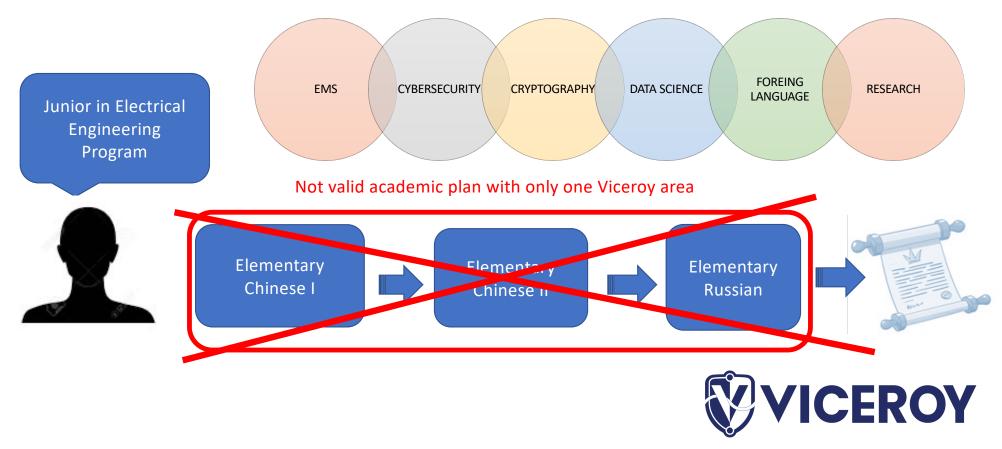
Academic Plan includes at least two different areas











#### **Courses by topic and Univerisity**

 VI curricula (Offer may vary over semesters)

	NAU	NU	UofSC	University Houston
EMS	PHY 332 Electricity and Magnetism II	CY 4760 Security Wireless Mobile Systems	and the second of the second o	ECE 3317 Applied Electromagnetic Waves ECE 3318 Applied Electricity and Magnetism
Cyber		CY 4930: Cybersecurity Capstone CY 3740/CY 5130: Systems Security		ECE 5357 Introduction to Cybersecurity
Crypto	INF 638 Cryptography and PKI CYB 402 Applied Cryptography			
Data Science		DS 3000 Found. Of Data Science DS 3500 Advanced Programming with Data		
Strategic Language		CHNS 1101/1102 Elementary Chinese 1&2	RUSS 121 Elementary Russian	
Research	CS485 Undergraduate Research	CY 2991. Research in Cybersecurity	ITEC 564 Capstone Project	



- Courses included in the VI curricula provide
  - Syllabus
  - Content
  - Required background
  - Academic prerequisites
  - Intended skills

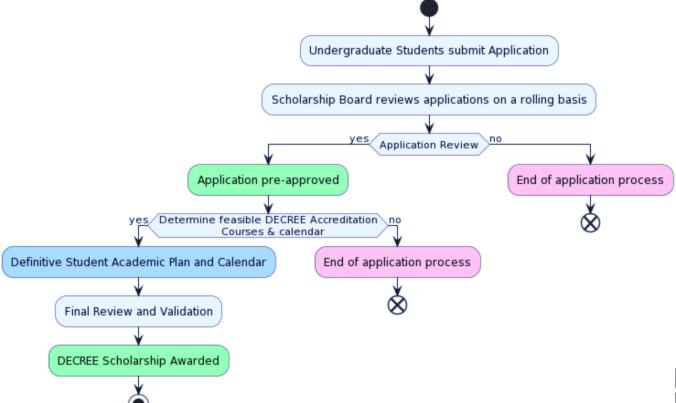


https://nu-decree.github.io/list.html

- Viceroy courses needs to be taken as part of full-time course load
  - <u>Trying to overload (taking it as a fifth class) or taking it on co-op, means the student will need to pay for the course</u>.

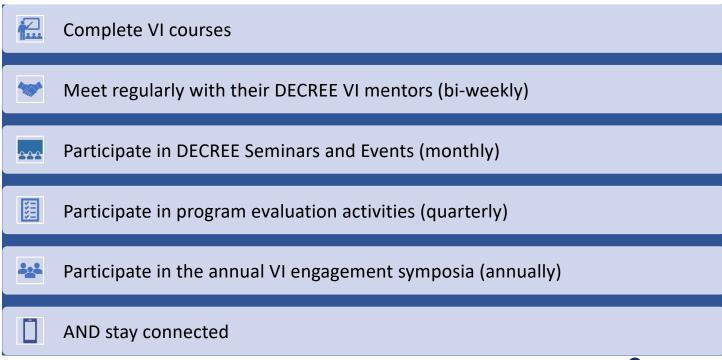


## **Application process**





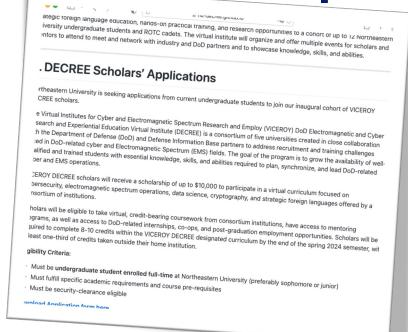
## Scholars' responsibilities





## Apply for DECREE VI scholarship

- Go to our Web page (<a href="http://nu-decree.github.io">http://nu-decree.github.io</a>)
- Application Components:
  - 1. Letter of Recommendation
  - 2. Short essay responses
  - 3. Resume
  - 4. Transcript
  - 5. Application form
- Priority Application Deadline is June 23rd





## **Stay Connected**

- √ <a href="https://nu-decree.github.io">https://nu-decree.github.io</a>
- √ <a href="https://nu-decree.github.io/#calendar-">https://nu-decree.github.io/#calendar-</a>
- √ <a href="https://nu-decree.github.io/list.html">https://nu-decree.github.io/list.html</a>







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