UNB
EST. 1785
UNIVERSITY OF NEW BRUNSWICK

Canadian
Institute for
Cybersecurity

CYBERSECURITY
GRADUATE
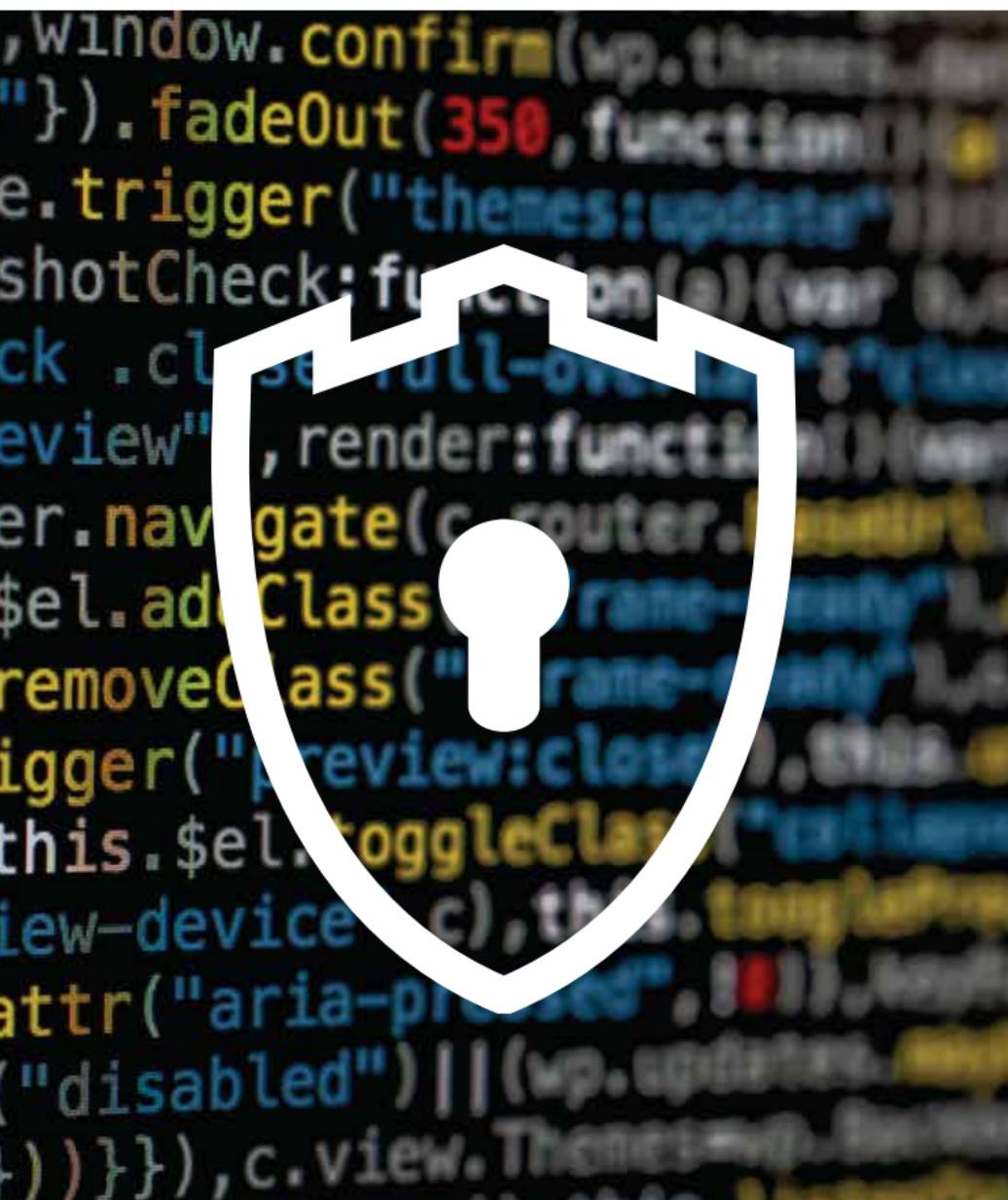# STUDIES

MASTER OF APPLIED
CYBERSECURITY (MACSec)

THE OPPORTUNITY

The need for talent in cybersecurity continues to grow. From 2019–2023E, approximately $5.2 trillion in global value will be at risk from cyberattacks.

With 3.5 million unfilled cybersecurity positions, and an average salary of $100k, the Master of Applied Cybersecurity (MACSec) will help equip you to enter this ever-evolving industry.

The Canadian Institute for Cybersecurity (CIC) at the University of New Brunswick (UNB) is an innovator in cybersecurity research with over 20 years of industry-leading knowledge.

Through this program, you may join the Research Intensive Cyber Knowledge Studies (RICKS) where you may work in an R&D project with a CIC industry partner - and the potential to get a full scholarship and an employment offer.

MASTERS PROGRAM IN CYBERSECURITY (MACSec)

COURSE SCHEDULE

FALL TERM
• Fundamentals of Information Security
• Fundamentals of Information Assurance
• Advanced Data Communications and Networking
• Cryptanalysis and Database Security

WINTER TERM
• Network Security
• Foundations of Privacy
• Software Security
• Project Management for Cyber Security Environments

SUMMER TERM - FINAL MACSec TERM
• Digital Forensics
• Capstone Project (6 credits)

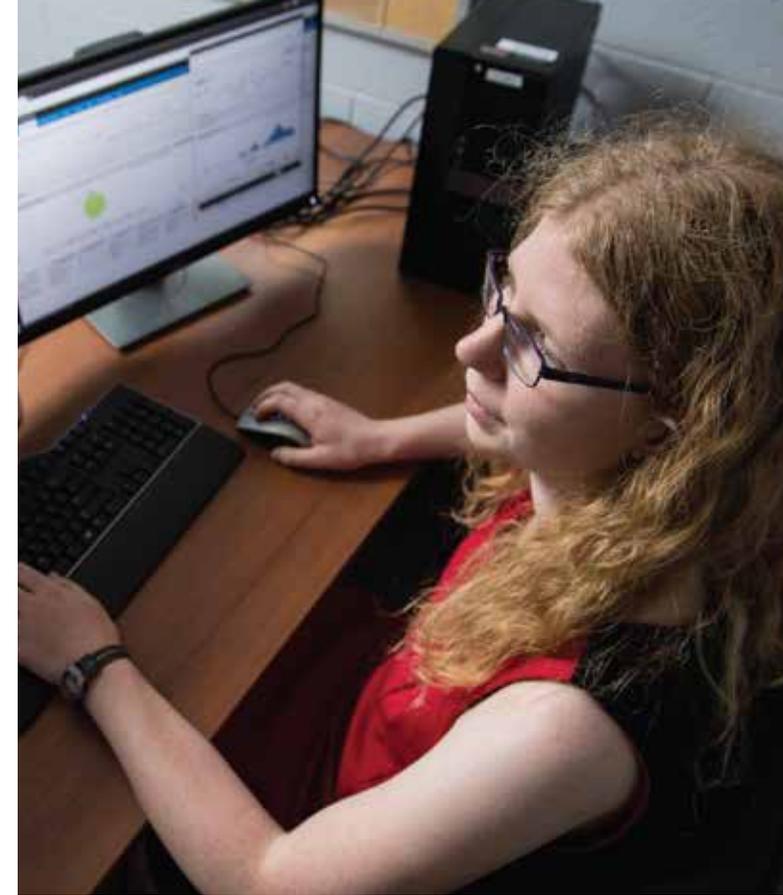### FALL TERM - RICKS starts*
• 4-month R&D project specified by Industry Partner
  Including:
      2-week Cybersecurity Project Management
      2-week Cybersecurity New Product Development

*For the MACSec students selected by the Industrial Partner

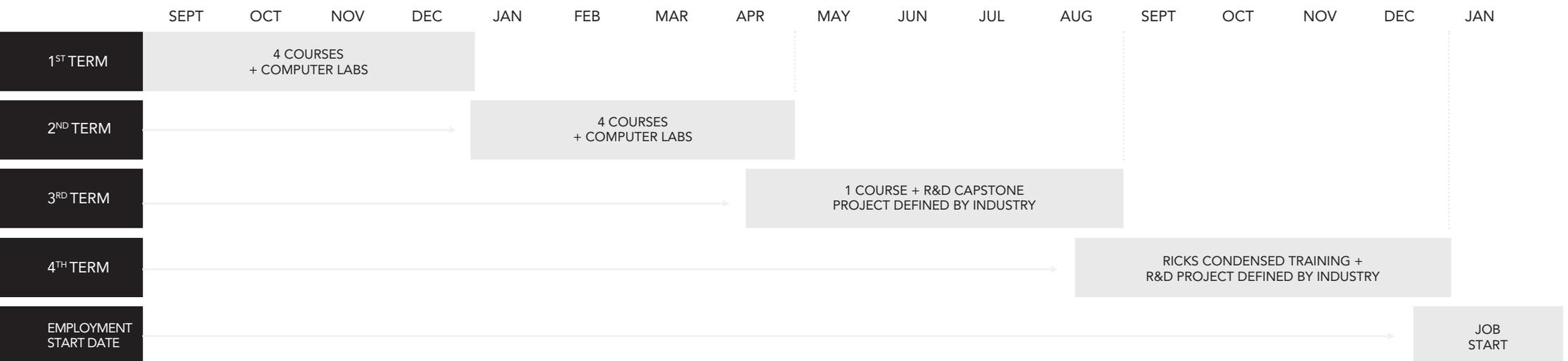**UNB MASTER OF APPLIED CYBERSECURITY** (12 MONTHS)

RESEARCH INTENSIVE CYBER KNOWLEDGE STUDIES PROGRAM (16 MONTHS)

RESEARCH INTENSIVE CYBER KNOWLEDGE STUDIES (RICKS)

PROGRAM STRUCTURE TIMELINE (16 MONTHS)
READY TO START SEPTEMBER 2020

	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN
1ST TERM	4 COURSES + COMPUTER LABS																
2ND TERM					4 COURSES + COMPUTER LABS												
3RD TERM									1 COURSE + R&D CAPSTONE PROJECT DEFINED BY INDUSTRY								
4TH TERM													RICKS CONDENSED TRAINING + R&D PROJECT DEFINED BY INDUSTRY				
EMPLOYMENT START DATE																	JOB START

THE TOPICS EXPLORED THROUGHOUT THE YEAR-LONG GRADUATE STUDY IN CYBERSECURITY ARE:

ADVANCED DATA COMMUNICATIONS AND NETWORKING
CRYPTANALYSIS AND DATABASE SECURITY
FUNDAMENTALS OF INFORMATION ASSURANCE
FOUNDATIONS OF PRIVACY • NETWORK SECURITY
SOFTWARE SECURITY • DIGITAL FORENSICS
ELECTIVE COURSE + CAPSTONE PROJECT
CONDENSED TRAINING, R&D PROJECT*

AND PREPARES YOU FOR CAREERS SUCH AS:

CHIEF INFORMATION SECURITY OFFICER
FORENSIC COMPUTER ANALYST
INFORMATION SECURITY ANALYST • PENETRATION TESTER
SECURITY ARCHITECT • IT SECURITY ENGINEER
SECURITY SYSTEMS ADMINISTRATOR
IT SECURITY CONSULTANT

APPLICATION REQUIREMENTS

1. Undergraduate degree in Computer Science (or related discipline such as Engineering or Science), with a minimum GPA of B

2. Computer Science background requirements: software engineering, data structures, operating systems, algorithms and computer architecture (**applicants without a Computer Science undergraduate degree, an educational requirement for acceptance into the MACSec program, will be viewed as a NON-qualifying applicant**)

3. English proficiency test results (applies to International applicants; needs TOEFL iBT 92 with 23 written, IELTS band 7 overall and written, or equivalent)

4. Complete the application form at **https://applygrad.unb.ca/**

CONTACT CIC@UNB.CA
FOR MORE INFORMATION

APPLY NOW
AT APPLYGRAD.UNB.CA