

M.S. in Cyber Intelligence and Security

At the **Prescott Campus**, the Master of Science in Cyber Intelligence and Security is housed within the College of Business, Security and Intelligence. Students graduate with expertise in areas such as cyber threat hunting, cyber intelligence analysis, machine learning and AI, IoT, network, cloud, and cyber-physical system security.

The program is led by faculty who combine academic scholarship with professional experience in cybersecurity. Aligned with recommendations from the National Security Agency and other security organizations, the curriculum develops strategic leaders capable of addressing evolving cyber threats. Embry-Riddle partners with the Arizona Cyber Threat Response Alliance (ACTRA) and other industry and public sector organizations to maintain alignment with cybersecurity workforce needs.

Embry-Riddle is a member of the National Cybersecurity & Education Training Center (formerly Cyberwatch West) and maintains current best practices. Industry connections, including partnerships with the Prescott Technology Accelerator and the Arizona Cyber Pipeline Task Force, provide opportunities for applied experience and professional engagement.

Program-Level Student Learning Outcomes

Students will:

- Communicate technical and non-technical information and concepts in written, digital and oral forms.
- Analyze situations to propose innovative solutions for problems within professional and personal environments.
- Exhibit professional responsibilities to make informed judgments in computing practice based on legal and ethical principles.
- Develop cyber intelligence and security solutions that meet given system requirements.
- Evaluate original cyber intelligence and security solutions that meet given system requirements.

Prescott Program Requirements

Core Requirements	30
Total Credits	30

Program Details

The Master of Science in Cyber Intelligence and Security program requires successful completion of a minimum of 30 credit hours. The curriculum consists of core coursework, elective coursework, and a culminating experience through a graduate project, comprehensive examination, or master's thesis. Students pursuing this graduate degree must earn a minimum cumulative grade point average (CGPA) of 3.00 for all work completed at the University. The program may typically be completed in 18 to 24 months assuming full-time enrollment. The courses necessary to earn this degree are listed below.

Students should be aware that many courses have prerequisites and/or corequisites. Students are encouraged to engage with public- and private-sector partner organizations through research, project work, and other experiential learning opportunities. Students are responsible for ensuring that all prerequisite and degree requirements are met prior to enrollment in advanced coursework.

Core Requirements

CISE 505	Cyber Intelligence and Information Systems Security	3
CISE 515	System Security and Architecture	3
CISE 525	Advanced Network Technology and Security	3

CISE 555	Software Reverse Engineering and Malware Analysis	3
CISE 575	Emerging Topics in Cybersecurity	3
CISE 625	Advanced Network Forensics	3
CISE 630	Threat Intelligence	3
CISE 675	Advanced Topics in Cybersecurity	3
CISE 690 or CISE 700	Cyber Security Graduate Project Graduate Thesis	6
Total Credits		30

Suggested Plan of Study

Year One

Requirements	Credits
CISE 505 - Cyber Intelligence and Information Systems Security	3
CISE 555 - Software Reverse Engineering and Malware Analysis	3
Semester Hours	6

Requirements	Credits
CISE 515 - System Security and Architecture	3
CISE 525 - Advanced Network Technology and Security	3
CISE 575 - Emerging Topics in Cybersecurity	3
Semester Hours	9

Total Credits

Total Hours for All Requirements: 15

Year Two

Requirements	Credits
CISE 625 - Advanced Network Forensics	3
CISE 675 - Advanced Topics in Cybersecurity	3
Semester Hours	6

Requirements	Credits
CISE 630 - Threat Intelligence	3
CISE 690 - Cyber Security Graduate Project or 700 - Graduate Thesis	6
Semester Hours	9

Total Credits

Total Hours for All Requirements: 15