

Aviation Cybersecurity (CYAV)

CYAV 510 Security Engineering and Management 3 Credits (3,0)

Cybersecurity integration in projects involving information in computer/network settings; ICT, distributed systems, network attacks and defense; security management, encryption; role of training and education in cybersecurity.

Course Offered at: Worldwide

CYAV 515 Foundations of Aviation Cybersecurity 3 Credits (3,0)

Cybersecurity impacts on aviation ecosystem; threats to airplanes, UAS, ATC, aerospace; mitigations to threats; role of humans in cybersecurity; regulations and best practices in aviation cybersecurity.

Course Offered at: Worldwide, Asia

CYAV 516 Operational Technology Risks in Aviation - IoT, ICS, SCADA 3 Credits (3,0)

OT risks in aviation; use of IoT, ICS, SCADA in aviation; OT in aircraft manufacturing, maintenance, passenger/luggage tracking, entertainment; security vulnerabilities in OT.

Course Offered at: Worldwide

CYAV 517 Uncrewed and Autonomous Systems Cybersecurity 3 Credits (3,0)

Cybersecurity challenges in uncrewed aviation systems; emerging threats; jamming, spoofing, hacking, electronic interference of uncrewed systems.

Course Offered at: Worldwide, Asia

CYAV 520 Aviation Cybersecurity Threats, Actors, Tools, and Techniques 3 Credits (3,0)

Cybersecurity threats and actors in aviation; tools and techniques for defense; incident response and operational defense planning.

Course Offered at: Worldwide, Asia

CYAV 525 Aviation Cybersecurity Risk Management and Resilience 3 Credits (3,0)

Cybersecurity risk management process; risk identification, assessment, mitigation, monitoring; resilience in aviation cybersecurity; comprehensive incident response strategy.

Course Offered at: Worldwide, Asia

CYAV 526 Cybersecurity Standards, Laws, and Regulations 3 Credits (3,0)

International/national standards, laws, regulations in cybersecurity and aviation; ICAO, FAA, EASA regulations; compliance, risk mitigation; analysis of conflicting standards.

Course Offered at: Worldwide

CYAV 599 Special Topics in Aviation Cybersecurity 1-6 Credit (1-6,0)

Individual, independent, or directed studies of selected topics in aviation cybersecurity.

Course Offered at: Daytona Beach, Prescott, Worldwide