

WISA eLEARNING

# Aviation and Climate Change

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*Discover new technologies,  
policies and practices  
for a sustainable future.*



UNIVERSITY OF  
**WATERLOO**

| **WISA**

Waterloo Institute for  
Sustainable Aeronautics



# Meet your instructor

**DR. SUZANNE KEARNS** is the Founding Director of the Waterloo Institute for Sustainable Aeronautics and Associate Professor of Aviation at the University of Waterloo. An expert in online education and internationally recognized within the industry, she has taught thousands of aviation professionals worldwide. Dr. Kearns is a former airplane and helicopter pilot, as well as the author or co-author of six books, including *eLearning in Aviation* and *Fundamentals of International Aviation*.

*Dr. Suzanne Kearns*



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# Aviation and Climate Change

## *About this course*

From extreme weather to biodiversity loss, the effects of climate change are being felt around the globe. As our sector contributes to greenhouse gas emissions and other environmental challenges, aviation has a significant role to play in mitigating these negative impacts.

While the path ahead is uncertain, it's also full of opportunities for innovation and collaboration as we reimagine traditional approaches to air transport. In this course, you'll engage with the key climate issues facing aviation today and into the future. You'll discover solutions across the industry, from sustainable fuels to electric aircraft to climate policy, and explore how to promote a climate-safe future.

## STRUCTURE

12 modules with practice quizzes

25 hours of learning

100-question final exam



## KEY TOPICS

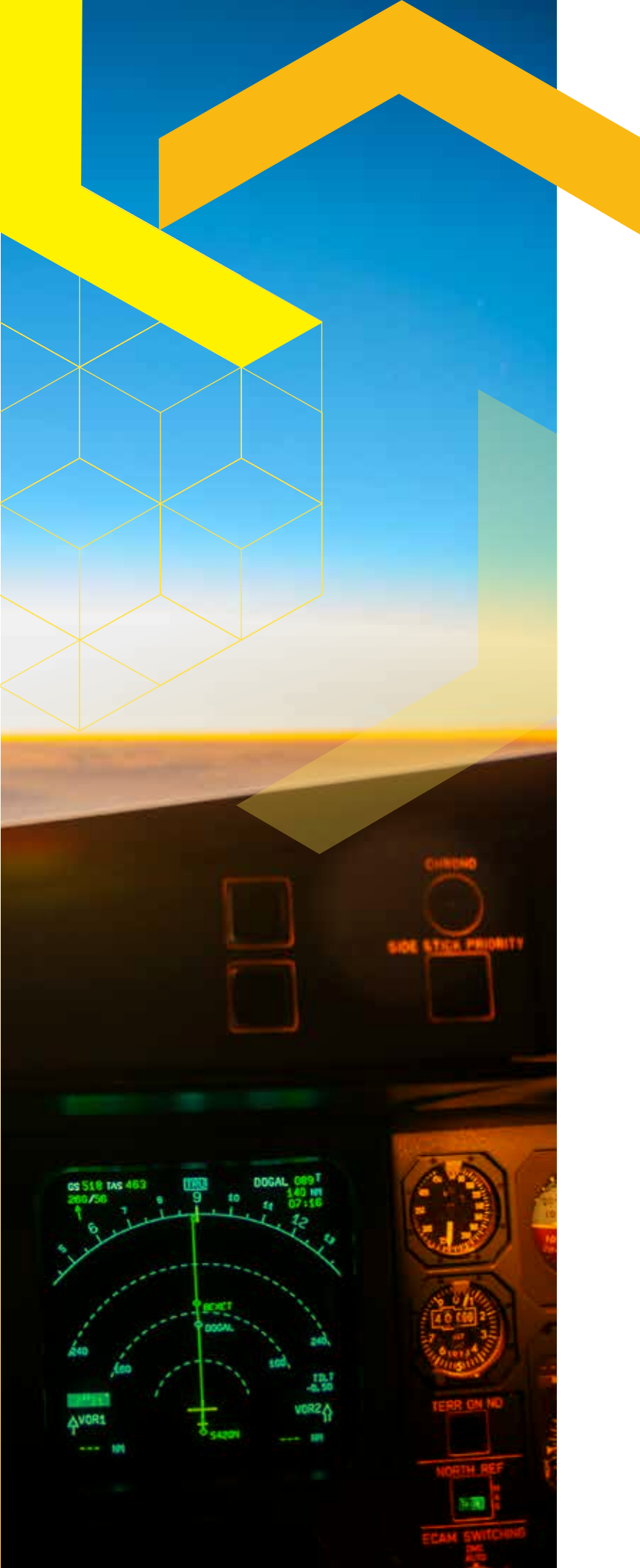
- > How aviation contributes to and is impacted by climate change
- > Importance of sustainable aviation in ongoing trade, migration, tourism, etc.
- > Emissions, energy efficiency, carbon offsetting and sustainable fuels
- > Low-carbon propulsion and net-zero aircraft technologies
- > Climate mitigation and emissions reduction for airlines and airports
- > Aviation safety in the context of extreme weather and natural disasters
- > How to take action on climate change in your personal life and career

## CREDENTIAL

Earn your certificate of completion when you successfully complete the course exam.

This certificate counts toward your International Aviation Sustainability Certification (IASC).





## *Related courses*

This course is part of the International Aviation Sustainability Certification (IASC), a three-part professional development certification that includes the following credentials:

Fundamentals of International Aviation

Aviation Sustainability

Aviation and Climate Change

Complete any of these courses individually or finish all three to earn the IASC.

## *Get climate-savvy from anywhere*

### **SELF-PACED**

On-demand learning means you complete this course on your own time – when you have time.

### **100% ONLINE**

Learn from anywhere! With no travel required, participation is convenient and eco-friendly.

### **INTERACTIVE**

A modern, gamified experience keeps you engaged with fun activities and a virtual instructor to guide you.

### **GLOBAL PERSPECTIVE**

Explore climate change through an international lens based on ICAO standards.

### **MADE FOR AVIATION**

Discover how to take climate action, no matter where you are in your career or the industry.

# Explore your role in the climate change solution



*Climate change is already impacting the air transport sector and aviation careers. Level up your knowledge and skills in this critical area.*

## UNDERSTAND CLIMATE TERMINOLOGY

in relation to your work and the industry at large.

## ENGAGE WITH KEY CLIMATE ISSUES RELEVANT TO AVIATION

so you can have more meaningful conversations with the media, colleagues or friends.

## BE A CLIMATE CHAMPION

in your workplace and community.

## EXPLORE GREEN CAREER PATHS

and how to integrate climate action into your day-to-day work.



## *Launch your professional development journey*

Ready to dive in or learn more about WISA's eLearning courses?

[uwaterloo.ca/wisa](http://uwaterloo.ca/wisa)

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Federal Economic Development  
Agency for Southern Ontario

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Agence fédérale de développement  
économique pour le Sud de l'Ontario

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