



ADMS-Airport Training Course

COURSE OVERVIEW

ADMS-Airport incorporates all of the features of the air quality model ADMS-Urban, and has additional capabilities for modelling aircraft sources and other sources related to airports.

The ADMS-Airport training course focuses on assessing the impact on air quality of a full range of sources of pollution, including roads, industrial sources, aircraft and other sources. The course covers the collation and management of emissions data using CERC's emissions inventory toolkit, EMIT, as well as dispersion modelling using ADMS-Airport. Some general aspects of urban dispersion modelling are presented using material from the ADMS-Urban training course. The later part of the course focuses on modelling aircraft and other airport-related sources using ADMS-Airport.

The course aims to equip you with the skills required to undertake an air quality modelling study of a region including an airport, using ADMS-Airport. No prior knowledge is assumed.

COURSE OUTLINE

Two-day course - 09:30 to 16:30 each day

Day One

- *Atmospheric dispersion and introduction to modelling*
- *Modelling road sources; modelling time-varying emissions*
- *Meteorology and long-term calculations*
- *Chemistry and background data*
- *Model verification*
- *Modelling large urban areas*
- *Introduction to EMIT and EMIT databases*
- *Creating a new EMIT database*
- *Exporting data from EMIT*
- *Road sources in EMIT*

Day Two

- *Introduction to airports – layout, operations and terminology*
- *Introduction to ADMS-Airport*
- *Aircraft terminology and detailed modelling of aircraft engine exhausts*
- *Describing the time-variation of airport sources*
- *Using source-oriented gridding with airport sources*
- *Airport sources in EMIT*
- *Using a grid source with airport sources*
- *Case study and worked examples*

On completion of the course, you will be able to

- recognise the airport sources modelled in studies of air quality, and represent them in ADMS-Airport, including the detailed modelling of aircraft engine exhausts
- use EMIT to calculate emissions from airport sources
- use various model options that are important for modelling airport sources, for example time-varying emissions data files, gridded source data, and source-oriented output grids
- complete an ADMS-Airport model run and display the results graphically.

COURSE LOCATION

The course can be delivered online or in person. The online course is delivered through a combination of audio presentations, hands-on worked examples and live communication with a CERC expert instructor.

If you complete the course online, you will have access to the online platform for one day after the course has ended, to enable you to consolidate your learning.

INSTRUCTORS

The CERC instructors are full-time consultants with extensive experience in their area of training. Their experience with projects transfers into a practical and effective learning opportunity.

COURSE MATERIAL

If you attend the course in person, you will be given a handbook containing the course material. Online attendees will be able to download the handbook. A course certificate can also be provided.

SOFTWARE

It is not necessary to purchase ADMS-Airport before completing the course; a free demonstration copy of the software with a one-month licence can be provided.

DISCOUNT

10% Discount

*on scheduled CERC training courses,
when purchased with a software annual
licence or support renewal*

ENQUIRIES AND REGISTRATION

For more information, or to enrol onto a course, please email training@cerc.co.uk.