South Dakota School of Mines and Technology

The South Dakota School of Mines and Technology has been a UCAR academic affiliate since 1990. Undergraduate and graduate programs in atmospheric and related sciences are hosted at the Department of Atmospheric Sciences (DAS). The programs are staffed by six (soon to be seven) faculty members involved in teaching and research, two support staff and an Institute director/department head.

DAS offers an Atmospheric Sciences specialization within the BS in Interdisciplinary Sciences. A well-established MS program in Atmospheric Sciences (with two specializations: meteorology and earth systems science) is also offered. Additionally, in conjunction with Civil and Environmental Engineering and with Geology and Geological Engineering, a new Ph.D. program in Atmospheric and Environmental Sciences has been developed. In the past five years, 16 BS, 17 MS and 7 PhD degrees have been granted.

Research is conducted through the Institute of Atmospheric Sciences (IAS) in a diverse range of fields, including weather modification, air quality, cloud physics, remote sensing, climate modeling and various others, resulting in various publications in peer-reviewed journals and presentations at national conferences. IAS is linked to the graduate and undergraduate programs, providing opportunities for research experience and technical training in meteorology, atmospheric science, remote sensing and environmental technology.

IAS faculty are currently collaborating with NCAR scientists, using UCAR products such as the WRF model and involved in programs such as SOARS. They are also involved in various other non-UCAR national and international initiatives.

In summary, the university offers well-established and emerging undergraduate and graduate programs in atmospheric and related sciences. Its students and faculty conduct various types of research that contribute to progress in atmospheric sciences. Additionally, they are active participants and users of UCAR activities and services as well as collaborate with other UCAR members. Finally, the academic and research programs are growing and evolving and the department and institute are planning accordingly.

The UCAR Membership Committee concludes that the academic affiliate criteria are fulfilled and recommends to the Members' Representatives that the affiliation of the South Dakota School of Mines and Technology be continued as provided by the UCAR bylaws.