INTEGRATED SCIENTIFIC APPLICATIONS, M.S.

The goal of the Millersville University MSISA program is to produce professionals with cross-disciplinary scientific skills and business knowledge. The MSISA degree was developed in response to local and national trends indicating the need for highly skilled, technically astute scientists possessing good business sense and excellent communication skills. There are four specializations within the program:

1. Climate Science Applications: Learn to interpret and articulate climate science information emphasizing impacts on society, infrastructure and critical resources.
2. Environmental Earth Systems Management: Prepare for careers that bridge environmental sciences with business competencies and geospatial data management.
3. GeoInformatics: Students develop skills in remote sensing, data management, GIS and image analysis, and learn to apply them within a business context.
4. Weather Intelligence and Risk Management: Develop proficiencies in quantifying uncertainty and management of weather-related risk within the business enterprise.
5. Space Weather and Environment: Science, Policy, and Communication

See mville.us/msisa for detailed information on the core curriculum and specializations.

Admission Requirements

Before an application will be considered for admission, the following documents must be submitted to the College of Graduate Studies and Adult Learning: a completed graduate program application and application fee, an official transcript from all institutions of higher education attended, verification of completion of a baccalaureate degree from a regionally accredited institution, three professional or academic recommendation forms, a goal statement and a résumé. If an applicant does not have a minimum undergraduate GPA of 3.0, an official score from the GRE, MAT or GMAT taken within five years of the date of application is required. Applicants whose first language is not English must submit their score from the Test of English as a Foreign Language (TOEFL). The TOEFL must have been completed within the past two years. Students with non-U.S. degrees must submit official academic credentials evaluated by an evaluation service (see Application as an International Student for more information).

Degree Requirements

The MSISA consists of 36 graduate credits, which includes 33 credits in the interdisciplinary core curriculum and professional specialization area, and a three-credit internship or applied research activity. The professional specializations within the MSISA include Weather Intelligence and Risk Management (WIRM), GeoInformatics (GI), Environmental Systems Management (ESM) and Climate Science Applications (CSA). The required internship or research activity will be conducted as a full-time summer or a full-semester experience under the mentorship of a faculty member and the supervision of a member of the external partner organization. It is anticipated that students will have opportunities to take part in funded research activities with University faculty and/or government or private-sector scientists and professionals. Visit mville.us/