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 (http://www.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 30 graduate credits. The professional specializations within the MSISA include Weather Intelligence and Risk Management (WIRM), GeoInformatics (GI), Environmental Systems Management (ESM) and Climate Science Applications (CSA). Visit mville.us/msisa (http://www.mville.us/msisa/) for additional information, or email gradadmissions@millersville.edu.

Climate Science Applications (CSA)
Major in Integrated Scientific Applications

Code	Title	Hours
Credits Required for Major		
	true	
CORE COURSES		
Business Operations and Analysis		
BUAD 653 at Millersville, EMGT 629 Continuity Planning, or Take BSN 511 at Shippensburg University		
GIS Applications or Information Analysis - Choose 1 of the following:		3
EMGT 633	GIS Applications for Emer Mgmt	
EMGT 691	Ind Stdy: (Ind Stdy: Python Int Stds)	
Accounting and Finance		
Take BSN 512 at Shippensburg University or MATH 695 Topics: Financial Math		
Strategic Management/Leadership		
Take BUAD 670 at Millersville or BSN 514 at Shippensburg University		
ECON 507	Environmental Econ and Policy	3
MATH 535	Statistical Methods 1	3
EMGT 693	Field Experience Practicum	3
A Concentration is Required.		
A concentration must be declared with this degree. Options are: Weather Intelligence and Risk Management, Geoinformatics, Climate Science Applications, Environmental Systems Management, or Space Weather Environment		
Total Hours		**12**