

# NCAS-M II

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**EDUCATION EXPERT**

**JANUARY 17, 2023**



**NOAA COOPERATIVE SCIENCE  
CENTER IN ATMOSPHERIC  
SCIENCES & METEOROLOGY**  
EDUCATION RESEARCH IMPACT

# Overview

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NOAA COOPERATIVE SCIENCE  
CENTER IN ATMOSPHERIC  
SCIENCES & METEOROLOGY  
EDUCATION RESEARCH IMPACT

- A.** Welcome and Purpose
- B.** Requirements, Expectations, Policies, and Procedures
  - a.** Offer Letter, Student Contract, Contact Form, Likeness & Profile Release Form to NOAA, and Other Required Documents
  - b.** Individual Student Development Plan (SDP)
  - c.** NERTO / NETSI (graduate students and undergraduate students)
  - d.** NCAS-M II Trainings and Professional Development
    - i.** NOAA Skills and Competencies Training at NCAS-M II
    - ii.** NCAS-M II Interdisciplinary Research Focus Group Seminar Series
    - iii.** CSC Education Leads Webinar Series
    - iv.** NCAS-M Center-Wide Cohort Experience
  - e.** Overview of Howard University Graduate Program in Atmospheric Science (HUPAS)
- C.** Website, Social Media
- D.** Center Calendar
- E.** Q & A



# NOAA Cooperative Science Center in Atmospheric Sciences and Meteorology II (NCAS-M II)

**Mission:** Increase the number of workforce ready graduates from underrepresented communities in NOAA-related sciences, esp. atmospheric sciences and meteorology

Cooperative Science Center

**Who:** 9 partner institutions, undergraduate and graduate students

## Partner Institutions:

1. Howard University (Lead)
2. Jackson State University
3. Pennsylvania State University
4. San Jose State University
5. University at Albany, SUNY
6. University of Puerto Rico-Mayaguez
7. University of Texas, El Paso
8. University of Maryland Baltimore County
9. University of Maryland College Park



# NCAS-M II Forms

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- Offer Letter
- Student Contract (aka Letter of Understanding)
- Contact Form
- NCAS-M Likeness & Profile Release Form to NOAA
- Other Required Documents

[ncas-m.org](https://ncas-m.org) > Resources > Forms

# NCAS-M II Requirements

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Fellowship requirements:

- ✓ Full-time status as an undergraduate or graduate student
- ✓ Enrolled at one of the 9 NCAS-M II partner institutions
- ✓ U.S. citizenship
- ✓ Minimum 3.0 GPA
- ✓ Major in a NOAA mission discipline in Atmospheric Sciences and Meteorology and/or social, behavioral, or economic (SBE) sciences

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- Fellowship recipients must complete at least 24 semester hours (36 quarter hours) in **meteorology/atmospheric science** to include courses in **atmospheric dynamics, synoptic/mesoscale, physical meteorology, remote sensing/ instrumentation, and differential equations.**
- Graduate students must complete a 12-week graduate internship at a NOAA facility with a NOAA employee.
- Undergraduate students are highly encouraged to complete a 10-week summer internship at a NOAA facility under the direction of a NOAA mentor.

# Education & Training – Major Activities

1. Individual Student Development Plan (SDP)
2. NOAA Mission-Aligned Internships
  1. NOAA Experiential Research and Training Opportunity (NERTO) – Graduate Students
  2. NOAA Experiential Training Summer Internship (NETSI) – Undergraduate Students
3. NOAA Skills and Competencies Training at NCAS-M II
4. Annual Center-wide Cohort Experience and Other Experiences

**AA COOPERATIVE  
CENTER IN ATMOSPHERIC  
SCIENCES & METEOROLOGICAL  
EDUCATION RESEARCH**





# Individual Student Development Plan (SDP)

SDP – online form completed 4 times a year

SDP notes and tracks educational outcomes and skills/competencies attained:

- research internships at NOAA facilities
- presentations at conferences
- professional development trainings
- NCAS-M core competency attainment





# NOAA Mission Internships

## NETSI - UNDERGRADUATE

- Strongly encouraged
- NOAA mentor & faculty advisor
- 10-week summer internship
- NOAA mission research at NOAA facility
- Direct Hire Certificate of Eligibility

## NERTO - GRADUATE

- Required
- NOAA mentor & faculty advisor
- 12-week internship
- NOAA mission research at NOAA facility
- Direct Hire Certificate of Eligibility

**NOAA Experiential Training Summer Internship (NETSI)**  
**NOAA Experiential Research & Training Opportunity (NERTO)**







### Prior to NERTO

1. NERTO orientation for graduate students & NCAS -M II faculty advisor

2. DS and/or NCAS -M II faculty advisor (FA) connect with NOAA mentor

3. Education Expert (EE) and Distinguished Scientist (DS) review SSIO online system for graduate student opportunities

4. If no opportunities found in #3, new opportunity written and uploaded to SSIO by NOAA mentor

5. Meeting scheduled with student, FA, EE, DS, and NOAA mentor to discuss NERTO process and opportunity

6. Student submits application package to EE

7. NCAS -M II submits application package to NOAA OEd

8. NOAA OEd submits application package to NOAA mentor

9. NOAA mentor accepts and submits offer letter to NOAA OEd

10. NOAA OEd sends offer letter to NCAS -M II

11. Student submits acceptance letter to NCAS -M II

12. Student's acceptance letter and Center Director's letter sent to NOAA OEd

13. NOAA OEd forwards acceptance letter to NOAA Mentor

14. NOAA mentor submits 12 - week Workplan to NOAA OEd

15. EE, DS, FA and NOAA mentor meet with student to discuss NERTO roles and responsibilities

### During NERTO

16. NERTO begins

17. Weekly check-ins during NERTO (students); biweekly check-ins during NERTO (NOAA mentor); monthly check-in with all students (group)

### After NERTO

18. NERTO ends

19. Student submits final performance report to NCAS -M 14 days after end of NERTO

20. Student presents research at One NOAA Science Seminar



# NOAA Skills and Competencies Training at NCAS-M II

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## NOAA Skills and Competencies Training

- NOAA Subject Matter Experts
- Monthly Trainings
- NOAA Mission-Aligned Topics
- Policy and Practice





# Annual Center-Wide Cohort Experience and Other Experiences

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## Annual Center-Wide Cohort Experience

- 2-day Center-wide event
- Cohorts and leverage students participate
- Held at Howard University
- Involves speakers from NOAA, Professional Development consultants, and skill training

## Other Experiences

- Monthly Webinars
- Interdisciplinary Research Focus Group Seminar Series
- CSC Education Leads Webinar Series
- Professional Meetings (e.g., AMS Annual Meeting, AMS Washington Forum)





# NCAS-M Core Competencies & Levels

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## NCAS-M II CORE COMPETENCIES

1. Ability to **conduct translatable data science and social competencies to communicate impacts** of NOAA and NWS mission services and products
2. Ability to **experience and conduct R&D projects from end to end**
3. Ability to **identify, prepare, analyze, interpret, and convey impacts to decision makers** and the public

## LEVELS OF COMPETENCE

**1=Awareness**

**2=Understanding of fundamentals** and some initial practical application

**3=Solid conceptual understanding** and some practical application

**4=Significant conceptual knowledge** and practical experience in performing a competency to a consistently high standard

**5=Extensive knowledge**, refined skill, and prolonged experience (minimum of 3 years) in performing the defined competency at the highest standard

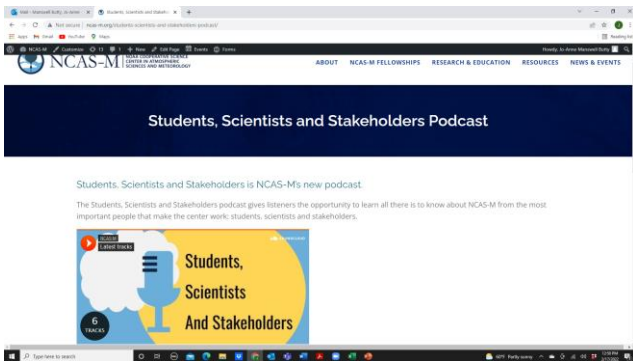


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# WEB

<http://ncas-m.org>

- Online Fellowship Application
- NCAS-M II Fellowship
- Research and Education
- Resources
- News and Events
- Forms



<b>Spring 2023</b>	<b>Jan</b>	8-12 •AMS Annual Meeting 17 •Center-wide Student Orientation (4-5 pm ET) 18 •Center-wide NERTO / NETSI Orientation (UG & G) 19 •HU Chat and Chew 26 •NOAA Skills and Competencies Training –1 (4-5 pm ET) TBD • Unidata Regional Python Training Workshop (UG & G)
	<b>Feb</b>	15 • Interdisciplinary Research Focus Group Seminar Series (4-5 pm ET) 22 •NOAA Skills and Competencies Training –2 (4-5 pm ET) 23 •CSC Education Leads Webinar Series (12:30-2 pm ET) TBD •NERTO /NETSI Preparation Meetings (UG & Grad) TBD • Unidata Regional Python Training Workshop (UG & G)
	<b>Mar</b>	15 • Interdisciplinary Research Focus Group Seminar Series (4-5 pm ET) 22 •NOAA Skills and Competencies Training –3 (4-5 pm ET) TBD •NERTO /NETSI Preparation Meetings (UG & Grad) TBD • Unidata Regional Python Training Workshop (UG & G)
	<b>Apr</b>	11 •Professional Development Series –1 19 • Interdisciplinary Research Focus Group Seminar Series (4-5 pm ET) 26 •NOAA Skills and Competencies Training –4 (4-5 pm ET) 27 •CSC Education Leads Webinar Series (4-5 pm ET) TBD •AMS Washington Forum TBD •NERTO /NETSI Preparation Meetings (UG & Grad) TBD • Unidata Regional Python Training Workshop (UG & G)
<b>Summer</b>	<b>May</b>	9 •Professional Development Series –2 17 • Interdisciplinary Research Focus Group Seminar Series (4-5 pm ET) TBD •Monthly NERTO Meetings
	<b>Jun</b>	TBD •Professional Development Office Hours TBD •Monthly NERTO Meetings
	<b>Jul</b>	18-19 •Annual NCAS-M II Center-Wide Student Experience TBD •Monthly NERTO Meetings
	<b>Aug</b>	TBD •Monthly NERTO Meetings TBD •Preparation for new cohort students

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## NCAS-M II Education and Training Calendar – Spring 2023

# Very Important Reminders!!

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## **Funding:**

NCAS-M II students are funded by the **NOAA Office of Education, Educational Partnership Program with Minority Serving Institutions** (NOAA EPP/MSI)

## **Acknowledgement Statement:**

Along with the **NCAS-M, Institution, and NOAA logos**, the following acknowledgment of NOAA EPP/MSI support must appear in the publication of any material, whether copyrighted or not, and any posters or oral presentations which is based upon or developed under the NCAS-M II award:

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# Very Important Reminders!!

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## **Signature:**

Be sure to **identify yourself as an NCAS-M II Fellow** in all communications and/or correspondences (e.g., in your school email signature, LinkedIn, business cards, ...)

## **NCAS-M II Faculty Advisor:**

**Communicate with your NCAS-M II Faculty Advisor** if you have any NCAS-M II questions. Be sure to **get approval** from your NCAS-M II advisor prior to a presentation or publication. Also, copy your advisor on any NCAS-M II correspondence.

# Questions

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