Two Master’s Degree programs at The University of Pennsylvania—

- **Master of Chemistry Education Program** – established in 2000 for secondary school science teachers
- **Master of Integrated Science Education Program** – established in 2005 for middle grades science teachers
- NSF funded stipends and Penn School of Arts and Sciences scholarships make the programs free to Core Partner SD teachers and affordable for all others
- **26 months** – courses are 8 weeks long in 3 consecutive summers and on alternating Saturdays during the 2 intervening academic years
- **8 science** content courses and 2 science education courses integrating science and pedagogy
- **Each cohort of 20 teachers** moves together through the 10 courses – hard collaborative work makes for strong collegial friends!
- Courses offered on the Penn campus with day-time parking provided
- **Information Technology for teaching and learning** is taught and emphasized
- **A resource center** provides continued support for teaching after graduation

Using technology in the field...

Discussing one-on-one with the faculty...

Building strong friendships through hard work!

**Recommended** by the National Academy of Sciences Committee on Prospering in the 21st Century as a model to strengthen the skills of current K-12 teachers*

Master’s Degree programs with scholarships for working professional science educators...

**Presented by**
The University of Pennsylvania  
Departments of Biology, Chemistry, Earth and Environmental Science, Mathematics, and Physics and Astronomy in The School of Arts and Sciences  
and  
The Graduate School of Education

[http://www.sas.upenn.edu/PennSTI](http://www.sas.upenn.edu/PennSTI)  
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*In ‘Rising Above The Gathering Storm: Energizing and Employing America for a Brighter Economic Future’
Features Common to Both Programs:

- **All courses developed specifically** for working professional science educators
- **Access to Resource Centers** to support program courses and classroom teaching both while a participant and after graduation
- **Grants program** open to participants and graduates of up to $1,000 for improving teaching and learning science
- **Administrator’s Science Education Academy** for Core Partner administrators
  - inquiry in science – lessons and evaluation
  - action research – participant classroom research projects and school communities
  - teacher leadership – school culture and supporting teacher leaders
  - administrators building a community of learners
- **For middle grades (5 – 9) science teachers interested in extending their science content background**
- Using the **Physics First** approach, the quantitative sciences including physics, chemistry and mathematics are studied first in the program – and then again at the end
- **Environmental Science, Earth and Space Science, and Principles of Biology** round out the content coursework
- **Elementary certified teachers** interested in working toward middle grades science certification are encouraged to apply

- **March 1 Application Deadline**
  For an application
  Send mailing address via email to: PennST1@sas.upenn.edu

For more Information see: http://www.sas.upenn.edu/PennST1