Program Structure

**WEEK 1:** will begin Wednesday and will teach basic programming and software engineering with an emphasis on the particular interests of environmental science students.

**WEEK 2:** will introduce advanced visualization and compiled languages.

**WEEK 3:** will cover material for high-performance computing, including serial optimization, high-throughput computing, MPI, and OpenMP.

**FOLLOWING 8 WEEKS:** Once attendees have completed this Summer School they should be well prepared for internships with modeling groups at any NASA laboratory.

Those selected will begin 8-week internships at various NASA research centers nationwide immediately following the Summer School.

Program Logistics

**2.5-Week Summer School:**
- Dates of Summer School: **May 29-June 14, 2013**
- 20 students will be admitted
- Summer School will take place at The University of Virginia
- Housing will be provided
- Breakfast and lunch will be provided on weekdays, and a stipend for dinners and meals on weekends will be paid

**8-Week NASA Internships:**
- Dates of Internships: **June 17-August 8, 2013**
- 10 students will be selected from the Summer School participant pool
- Internships will take place at various NASA centers
- Interns will receive a stipend of $600 per week

Application Process

Submission of online application, unofficial undergraduate transcript, 2 letters of reference and a letter of intent.

**Application Deadline**
March 15, 2013

To learn more about the program, visit: [http://www.uvacse.virginia.edu/isscens](http://www.uvacse.virginia.edu/isscens)
<table>
<thead>
<tr>
<th>DAY 1 Monday</th>
<th>WEEK ONE</th>
<th>WEEK TWO</th>
<th>WEEK THREE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEEK 7</strong></td>
<td>Lab: Working with NumPy arrays. Array operations on data. Mathematical operations. Development of a short module to analyze climate data.</td>
<td>Lab: Conversion of the defined type from the previous day into a class. Submitting jobs to a queue.</td>
<td>Lab: Another way to solve Laplace’s equation.</td>
</tr>
</tbody>
</table>

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