## ISAT and Geography

### Schedule and project summaries:

#### Refreshments are available on the 3rd floor of King Hall.

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### SESSION A | 8:45-9:25 AM

- **Conceptual Design for Solar Installer Training Capacity on the JMU Campus**
  - **Location:** KING 136

- **DukeSAT**
  - **Location:** KING 148

- **EPS insulated Composite Concrete Block**
  - **Location:** EnGEO 2014

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### SESSION B | 9:30-9:55 AM

- **Development Tools and Strategies for Community Wind Power in Rockingham County**
  - **Location:** KING 136

- **Football Helmets and Concussions: Social and Technical Considerations**
  - **Location:** KING 148

- **Waste to Walls: Creating Building Materials from Low-value Plastics**
  - **Location:** EnGEO 2014

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### SESSION C | 10:00-10:25 AM

- **Analyzing the effects of Total Dissolved Solids in Sand Branch, VA**
  - **Location:** KING 136

- **Noise Hazard Alert System and Adaptive Hearing Protection**
  - **Location:** KING 136

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### SESSION D | 10:30-10:55 AM

- **Potential Impacts of Climate Change on Stream Hydrology in the Shenandoah Valley**
  - **Location:** KING 136

- **Transportation options for College Students: small, individual electric vehicles**
  - **Location:** KING 136

- **Bio-Inspired Design in Manufacturing Systems**
  - **Location:** EnGEO 2014

- **Developing Greeks’ Sustainability Knowledge and Pro-environmental Behaviors**
  - **Location:** KING 159

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### SESSION E | 11:00-11:25 AM

- **A Simulation Model of the Virginia Energy Transition**
  - **Location:** KING 136

- **Ergonomic Guitar For Rehabilitation**
  - **Location:** EnGEO 2014

- **Integrating Machine Learning in Machining Control**
  - **Location:** EnGEO 2014

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### SESSION F | 11:30-11:55 AM

- **Web Development for High School Seniors in search of Career Options**
  - **Location:** KING 136

- **Does a Vegan Diet Impact Body Composition?**
  - **Location:** EnGEO 2014

- **Understanding the Environmental Impact Dynamics of CNC Machining**
  - **Location:** EnGEO 2014

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### POSTERS

**INTEGRATED SCIENCE AND TECHNOLOGY JUNIOR PROJECTS**

**FIRST FLOOR KING HALL -- MAIN HALLWAY**

**NOON-1 PM**

** GEOGRAPHY CLIMATE CHANGE PROJECTS**

**SECOND FLOOR ENGEO HALL -- MAIN HALLWAY**

**10:20-11:30 AM and 12:40-13:00 PM**
# POSTERS

### AFTERNOON SESSIONS

**INTEGRATED SCIENCE AND TECHNOLOGY JUNIOR PROJECTS**
FIRST FLOOR KING HALL -- MAIN HALLWAY
Noon-1 PM

**GEOGRAPHY CLIMATE CHANGE PROJECTS**
SECOND FLOOR ENGE 110 HALL -- MAIN HALLWAY
10:20-11:10 AM and 12:40-1:30 PM

## SESSION G | 12:45-1:25 PM and 1-1:25 PM

<table>
<thead>
<tr>
<th>Plastic Pavers (12:45 PM start) KING 348</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Social Dynamics in Manufacturing Shop Floor Environments (1 PM start) ENGE 120B</td>
</tr>
<tr>
<td>Video Games for Vestibular Rehabilitation Therapy (VG-VRT) (1 PM start) KING 14B</td>
</tr>
<tr>
<td>Antibiotic Resistance in Pseudomonas aeruginosa (1 PM start) KING 150</td>
</tr>
</tbody>
</table>

## SESSION H | 1:30-1:55 PM

| Using Biochar to Reduce Ammonia and Improve bird health in local Poultry Houses KING 348 |
| Understanding Mechanical Property Behaviors of Climbing Holds made from Recycled Plastics ENGE 120B |
| Water Monitoring on First Mountain State Forest using UAVs KING 14B |
| Human Genome Editing and the Future of Warfare: An Ethical Analysis KING 150 |

## SESSION I | 2-2:25 PM

| Energy Conservation Social Marketing Campaign for Off-Campus Students in Harrisonburg ENGE 120B |
| CAER App ENGE 2014 |
| Implementation and Monitoring of an Atmospheric Water Generator: Water Out of Thin Air (WOTA) Device KING 14B |
| Increasing Productivity, Decreasing Impacts: Carbon Farming and Stream Restoration in Mt. Clinton KING 348 |

## SESSION J | 2:30-2:55 PM and 2:30-3:10 PM

| Quantifying and Raising Awareness of the Plastic Waste Problem (2:35 PM end) KING 348 |
| Computer Vision and Edge Computing (2:55 PM end) KING 348 |
| Coral Reef Restoration in Costa Rica (3:10 PM end) KING 14B |

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