



## AdvantageGreen Energy Internships Program - Position Description

### About the Internship Program:

[AdvantageWest](#), the economic development partnership for Western North Carolina, has received funding from the State Energy Office of North Carolina to support the **AdvantageGreen Energy Internships Program**. This program will place nine, 12-month paid-internships with regional clean energy businesses and organizations providing experiential learning and training in a well-supported and supervised work environment. Through these positions, the program aims to create a pathway to full-time employment for talented recent graduates of NC colleges and universities, while at the same time helping expand our regional clean energy businesses.

### Eligible Applicants:

Applicants must be either (1) a graduate within the preceding three years of an accredited institution of higher education in the State of North Carolina; or (2) be a permanent resident of North Carolina who has graduated from an accredited out-of-state institution of higher education within the preceding three years.

### Host Business Info

**Business Name:** FLS Energy, Inc.  
**Business Address:** 239 Amboy Road  
Asheville, NC 28806  
**Type of Business:** Solar Energy  
**Website:** <http://www.flseenergy.com/>

### Internship Position Information

**Position Name:** Solar Energy System Design & Engineering Associate

### Position Description:

The Solar Energy System Design & Engineering Associate will provide direct support to FLS Energy's Design Team, as well as lead system research and calculations.

### Learning Objectives:

#### Key Responsibilities:

- System & Project Design
- System & Project Engineering including, but not limited to, thermo dynamics, pump calculations, heat calculations, heat exchange rates, system load, and system force
- New product research

System performance calculations

Daily Tasks:

Assist Design team with:

- New Product research
- Site visits to potential locations for future projects
- Job Specific work:
  - Solar Thermal: size pumps, pipe runs, tanks, and heat exchangers
  - Solar Photovoltaic: one-line diagrams, inverter sizing, calculating voltages, wire sizing, wire runs and conduit sizing

Skill Development/Learning Opportunities:

General solar energy system engineering knowledge

Design, Auto CAD exposure

Plumbing and electrical code

Ability to create and read one-line diagrams, schematics and construction plans

Ability to spec equipment

Engineering calculations

Office environment exposure

MS Office suite

Being part of a team on a project from start to finish; seeing their engineering work get installed and measuring its production relative to design specs.

**Additional Position Information:**

The Design & Engineering Associate will work in the FLS Energy offices in Asheville, and will have their own work space in the newly built Design Bay, sitting alongside three full time Designers. The Associate will work in collaboration with other members of the Design team to support Design and other departments such as Sales. The Associate will be managed by the Lead Designer on work duties related to design. The Associate will also have opportunities to continue their education through various solar workshops that members of the Design team attend.

**Duration:** The position will start in October 2010 and last 12 months  
40 hours/week, Monday – Friday

**Compensation:** \$15 / hr

**To Apply:** Please submit a resume, cover letter, and at least 3 references by email to:  
**John Gravitt, Lead Systems Designer** [john@flsenergy.com](mailto:john@flsenergy.com)

\*At least one of your references should be from the college or university from which you recently graduated

**Applications will be reviewed and interviews conducted on an ongoing basis. This position is expected to be filled by September 22<sup>nd</sup>.**