Just-in-Time Training for the Renewable Energy Job Sector

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Renewable Energy Training Center

Programs at MSC

- US DOL $2M grant (3 yrs.)
  - K-12 education & outreach
  - Displaced worker training
  - Workshops, short courses, online and dual-credit courses
  - NEW (this Fall) 2-yr A.A.S. degree in renewable energy technology

http://retc.morrisville.edu
Meeting NYS Renewable Energy Industry’s Needs: educators, workforce, economic development, employers, small business, farmers,...
MSC’s RETC offers over $400K in scholarships for:

- RETC workshops (50-95% of cost)
- Renewable energy degree programs ($2200/yr)
- Renewable energy credit courses (pre-college students - $300/course)
- In-service teacher training (K-12) – (e.g., $300 in supplies with training!)
A.A.S. Program

- Applied, “hands-on”
- Courses in electrical theory, analysis techniques, biofuels, wind, solar PV, solar thermal, and micro hydro
- Students will be prepared for working safely, site assessment, residential installations, troubleshooting, and maintenance.
MSC’s RETC Resources

On-site learning labs and dedicated faculty and staff
The Training Center – Location
The Training Center – Shannon Hall
Anaerobic Digester
Anaerobic Digester
Biofuels Research: *Algae*
Aquaculture, Hydroponics, & Energy

www.amhydro.com

www.solaroasis.com

fingerlakesfresh.com

www.amhydro.com
Biodiesel from Dining Hall Fryer Oil

- Campus dining facilities use 2500 gal. of oil per year
- Processor capacity:
  - 50 gal. per batch
    - (1 batch per week)
- Operated by students
- Future use of biodiesel:
  - greenhouse heating, tractors,...
Gasifier
(wood gasification)
Bergey Excel
10 kW Turbine
Meteorological Tower
Indoor Climbing Tower (Shannon Hall)

- Safety training - working at heights
  - Safety gear
  - Climbing
  - Tools
Fenner Wind Farm
(10 mi. from MSC campus)
Micro hydroelectric

Galbreath Farm
North St., Morrisville, NY
6-12 gpm, 41 ft. head, ~60 watts
Recent Training
Summer Youth Employment
2009 Professional Development Conference For Agricultural Educators
Oswegatchie Educational Center, Croghan, New York
PV Installer’s Courses

Solar Power as Renewable Energy
Fundamentals of Solar Thermal Systems

September 25, 2009
SUNY Morrisville
presented by John Siegenthaler, P.E.
Solar Thermal (Hot Water) Installation Lab
Short Courses at MSC

- Solar thermal
  - Advanced design course
    - Oct. 23, 2009
- Geothermal heat pumps
  - Nov. 13, 2009

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Upcoming Training

RENEWABLE ENERGY TRAINING CENTER
Future Technical Short Courses

- More solar PV (?)
- More solar thermal
- Micro Hydroelectric
- Small Wind Energy Technician Training (SWETT)
- Anaerobic Digester Training (with Cornell)
- Wood gasification

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Future Workshop Topics

- For Homeowners, Small Business, Farmers:
  - Energy Efficiency
  - Wind
  - Solar PV
  - Solar thermal
  - Biodiesel
  - Geothermal
  - Microhydro
Upcoming Online Course

- RENG 102 - Renewable Energy Resources
  - Survey course of renewable energy resources with a strong focus on energy efficiency
  - Reminder: Scholarships!

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