According to the U.S. Department of Labor’s Bureau of Labor Statistics, in 2014 there were 1,698,830 direct jobs in the Energy Industry.

This is an exciting and major growth industry. For example, in 2015, employers surveyed expect to see total employment in the solar industry increase by 20.9%.
About the MEA Program

The Mead Energy Academy (MEA) is a unique program that offers all interested students a secondary public education devoted to the principles of energy. The goal of this program is to equip future leaders to be innovators in an increasingly diverse energy industry. The MEA is open to all students whether their future plans include a two or four-year college degree, or direct entry into the workforce.

In the next five years, as much as 36% of the skilled energy workforce will need to be replaced due to retirement. By 2023, this estimate climbs to 50% (from the Center for Energy Workforce Development, [www.cewd.org](http://www.cewd.org)). Students who participate in the MEA program will be uniquely qualified to fill this growing need for a professional, diverse workforce. The MEA is also designed to prepare students for careers indirectly related to the energy industry, such as energy finance, environmental law, or energy brokering.

The MEA will prepare students for both academic college-bound and practical workforce-ready opportunities through cross-curricular courses in math, science, social studies, language arts, and business.

Completion of the MEA program will require 4 core courses: Geographic Information Systems (GIS), Principles of Energy Science, and Energy Industry Practices, and a Senior Project. Students will also be required to select three courses from the following list:

- AP Chemistry
- AP Environmental Science
- AP Physics 1
- AP Physics 2
- AP Biology
- AP Economics
- AP Language and Composition
- Marketing
- AP Computer Science
- Welding*
- Engineering Tech*
- Speech **
- Introduction to Business
- Business Law
- Meteorology
- AP Seminar
- Introduction to Programming
- Geology
- AP Calculus
- AP U.S. Government
- Start Your Own Business
- AP Statistics
- AP Research
- This list is subject to change
- *CDC class ** FRCC class

MEA Senior Project and Internship

Along with rigorous coursework, Mead Energy Academy seniors will design and complete a research project in conjunction with the opportunity for an internship with an energy related organization. Through both internships and the research projects designed by students, MEA participants will interact with energy professionals, apply modern technology in their project and develop skills needed in the workplace.

Careers in Energy:

**High School Diploma**

- Line Worker
- Driller
- Power Generation Technician
- Solar or Wind Technician
- Substation Mechanic
- Meter Technician
- Pipe layer
- Radiation Protection Technician
- Welder
- Lease Record Coordinator

**2 year degree**

- Solar or Wind Installer
- Power Plant Operator
- Nuclear Reactor Operator
- Environmental Protection Technician

**4 year degree or higher**

- Engineering
- Geologist
- Geophysicist
- Lawyer
- Government Relations Representative
- Lease Analyst
- Financial Planning Analyst
- Marketing Professional
- Health & Safety Advisor
- Environmental Scientist
- Information Technology Analyst
- Accountant
Energy Academy Program

Students must meet all of the St. Vrain Valley School District graduation requirements. Advanced Placement and Honors courses are encouraged in the Energy Academy, however our goal is for the program to be accessible to all students interested in energy. In addition to the St. Vrain Valley School District requirements, students who wish to receive an Energy Academy certificate upon graduation must also complete the following requirements:

**Energy Academy Core Courses** - Each student must complete core Energy courses with a grade of a C or better:
- Principles of Energy Science A & B (1.0 credit)
- Energy Industry Practices A & B (1.0 credit)
- GIS** (.5 credit)
- Internship & Capstone Project (.5 credit)

**Science** - Students must successfully complete a minimum of 4.0 science credits, which includes Biology, Chemistry, Principles of Energy Science and Energy Industry Practices. Additionally, students will need to complete GIS and Internship & Capstone Project. Students are required to have at least a C average or better in all semesters of the Energy Academy core courses to earn the Energy Academy certification.

**Energy Academy Electives** - Students will select 3 courses from the list below to complete as part of the Energy Academy Electives. These courses may be used as core or elective credits for graduation. If using these courses for core classes please ensure you have enough elective credits for graduation (8 total elective credits are needed for graduation). World Language and Energy Academy Core courses will count towards the St. Vrain Valley School District graduation requirements.

- AP Chemistry
- AP Physics C
- Marketing
- AP U.S. Government
- Engineering Tech*
- Business Law
- AP Seminar
- AP Calculus
- AP Environmental Science
- AP Micro/Macro Economics
- AP English Language and Composition
- AP Computer Science Principles
- Speech **
- AP U.S. History
- Introduction to Programming
- Start Your Own Business
- AP Physics 1
- AP Biology
- AP Research
- Welding*
- Introduction to Business
- Meteorology
- Geology
- AP Statistics

This list is subject to change
*CDC class
**FRCC class

**World Language** - Students will need to complete a minimum of 2.0 credits of the same world language.

**Mathematics** - Students must successfully complete 3.0 credits.

**English** - Students must complete 4.0 credits of English, which can include Honors and Advanced Placement courses.
## Sample Class Schedule for Energy Academy Students

<table>
<thead>
<tr>
<th>Freshmen</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principles of Energy</strong></td>
<td>Energy Industry Practices (1)</td>
<td>GIS (1)</td>
<td>Internship &amp; Capstone (1)</td>
</tr>
<tr>
<td>Algebra 1/Math (1)</td>
<td>Geometry/Math (1)</td>
<td>Algebra 2/Math (1)</td>
<td>Math (1)</td>
</tr>
<tr>
<td>Biology (1)</td>
<td>Chemistry (1)</td>
<td>Science (1)</td>
<td>Science (1)</td>
</tr>
<tr>
<td>English (1)</td>
<td>English (1)</td>
<td>English (1)</td>
<td>English (1)</td>
</tr>
<tr>
<td>World Geography (1)</td>
<td>U.S. History (1)</td>
<td>U.S./CO Government (1)</td>
<td>2 Electives (1)</td>
</tr>
<tr>
<td>World Language (1)</td>
<td>World Language (1)</td>
<td>World Language (1)</td>
<td>2 Electives (1)</td>
</tr>
<tr>
<td>Health/PE (.5/.5)</td>
<td>PE (1)</td>
<td>Optional Electives</td>
<td>Optional Electives</td>
</tr>
<tr>
<td>PE and Elective (.5/.5)</td>
<td>2 Electives (.5/.5)</td>
<td>Optional Electives</td>
<td>Optional Electives</td>
</tr>
<tr>
<td>8 Credits</td>
<td>8 Credits</td>
<td>6 credits</td>
<td>6 credits</td>
</tr>
</tbody>
</table>