STACK 2: Energy Auditor – Commissioning Agent

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 121 College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BGEN 105 Intro to Business</td>
<td>3 cr.</td>
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<tr>
<td>NRGY 101 Intro to Sustainable Energy I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NRGY 235 Building Energy Efficiency</td>
<td>4 cr.</td>
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<td>(select one)</td>
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<tr>
<td>ETEC 213 Power Systems Technology (OR)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NRGY 195 Energy Practicum</td>
<td>2 cr.</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15 or 16 credits</strong></td>
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</tbody>
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**M 121 – College Algebra**

Offered autumn and spring. The study of functions and their inverses; polynomial, rational, exponential, and logarithmic functions.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000
- **Lab hours:** 0.000

**Levels:** Undergraduate  
**Schedule Types:** Lecture

**BGEN 105 – Intro to Business**

Offered autumn and spring. Introduction to the world of business. Examines capitalism, the economic environment, the types of business organizations, management, marketing, production, labor, financing, and business/governmental relations.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000
- **Lab hours:** 0.000

**Levels:** Undergraduate  
**Schedule Types:** Lecture/Lab

**NRGY 101 – Intro to Sustainable Energy I**

Offered autumn and spring. A survey of traditional energy systems and technologies. Introduces conventional primary energy sources--coal, oil, gas, nuclear--and examines the technologies used to capture, convert, distribute, store, and utilize these energy sources. Consideration is given to physical and engineering aspects, as well as economic, social environmental, and political factors that determine the sustainability of these sources.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000
- **Lab hours:** 0.000

**Levels:** Undergraduate  
**Schedule Types:** Lecture/Lab
ETEC 213 – Power Systems Technology

Offered spring. A review of the principles of electricity, magnetism, and transformer action; the application of these principles in the operation of single-phase and three-phase ac/dc motors, alternators, and generators; and the control methods for these electrical devices.
3.000 Credit hours; 3.000 Lecture hours; 0.000 Lab hours
Levels: Undergraduate
Schedule Types: Lecture/Lab

NRGY 235 – Building Energy Efficiency

Offered spring. Study of the analysis techniques used for reduction of energy consumption and energy management, including energy accounting and energy auditing. Residential and commercial building energy efficiency opportunities will be covered. Other topics addressed include motors, pumps, green building, and purchasing energy supplies. Career opportunities in energy efficiency will be discussed. Students will be prepared to take the RESNET HERS Rater Exam at the conclusion of the course. Several local tours of energy-efficient homes will occur throughout the semester. Students also participate in hands-on HVAC operation and diagnostic training.
4.000 Credit hours; 3.000 Lecture hours; 1.000 Lab hours
Levels: Undergraduate
Schedule Types: Lecture/Lab

NRGY 195 - Energy Practicum

Same as CCS 191. The practicum provides students with a supervised field experience. Students will gain hands-on experience with energy specific technologies in a fast-paced creative environment. This course increases students' occupational awareness and professionalism.
2.000 Credit hours; 0.000 Lecture hours; 2.000 Lab hours
Levels: Undergraduate
Schedule Types: Lecture/Lab

*After successful completion of the coursework, students would either enter into an apprenticeship, internship, seek employment, or move on to higher education.