SUSTAINABLE AND RENEWABLE ENERGY SYSTEMS

Contact: Mesut Muslu
Office: 323 Engineering Hall
Phone: 608.342.1455
E-mail: muslu@uwplatt.edu

MAJOR

SUSTAINABLE AND RENEWABLE ENERGY PROGRAM (SRES) MAJOR, B.S.

- Development and Management Emphasis
- Design and Analysis Emphasis

ABOUT THE SRES PROGRAM AND MAJOR

The Sustainable and Renewable Energy Systems program is designed to provide students with strong foundational knowledge in renewable as well as traditional energy systems and their economic, social, political, and environmental impacts on society. The program provides the opportunity for UW-Platteville students to develop and deploy a comprehensive skills set in pursuit of solutions related to technical, economic, social, and environmental challenges related to energy, efficiency, and renewable resource management. Focal areas of study include core knowledge development in bioenergy, renewable products, operations, logistics and project management within associated markets under a framework of sustainable utilization of resources.

Graduates from this program will enter the workforce in a variety of roles with organizations such as utilities, energy producers, energy auditors, building design and construction firms, as well as federal, state, and local municipalities. We anticipate significant growth in this field over the next decade and beyond. Our graduates will utilize their training and pioneering spirit to lead the Midwest and the nation on a more sustainable path toward better and more efficient uses of energy.

MISSION STATEMENT

In consultation with the Renewable Energy Advisory Board (composed of industry professionals), broad program goals were identified and embedded into the program: a strong foundation in technical, economic, environmental and social aspects of traditional and renewable energy systems, including bio-energy and bio-products. Our goals are the following:

1. To equip students with abilities to assess the relative merits and potential impacts of different energy sources within the framework of sustainability
2. To equip students with a strong foundation in business and management aspects of renewable energy projects
3. To graduate students who are knowledgeable citizens prepared for the green jobs of the future
4. To support business and community partners through projects, seminars, and workshops

STUDENT LEARNING OUTCOMES

1. The ability to evaluate the role of energy and renewable energy, its sources, limitations, and use patterns in society
2. Fundamental knowledge of economic aspects of energy, renewable energy, and other limited resources within the framework of sustainability
3. Fundamental knowledge to understand environmental aspects of energy, renewable energy, and other limited resources within the framework of sustainability
4. Fundamental knowledge to understand social aspects of energy, renewable energy, and other limited resources within the framework of sustainability
5. A basic understanding of science involved in energy conversion and applications
6. The ability to assess the relative merits and potential impacts of different energy sources within the framework of sustainability
7. The ability to evaluate how conservation and energy efficiency fit into managing efficient use of energy
8. An understanding of how multiple technologies and disciplines work together in SRES
9. Hands-on experience with energy and renewable energy technologies
10. An understanding of the business and project management aspects of energy and renewable energy projects
11. The ability to communicate with people of diverse backgrounds both written and orally

BACHELOR OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for graduation</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>General Education</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>
MAJORS

  - Development and Management Emphasis
  - Design and Analysis Emphasis

Anthony Amato (SRES)

Mary Bartling (School of Business)

Michael Dalecki (Sociology)

Samir El-Omari (General Engineering)

Kristina Fields (Civil and Environmental Engineering)

Yari Johnson (School of Agriculture)

Mesut Muslu (Electrical Engineering)

Claudine Pied (Sociology)

Amy Seeboth-Wilson (Campus Sustainability Director)

Pamela Tas (SRES)

Thomas Zolper (Mechanical Engineering)