NRGY 102 - Intro to Sustainable Energy II. 3 Credits.
Offered autumn and spring. Offered at Missoula College. Prereq., NRGY 101 or consent of instructor. Same as CCS 102. A survey of renewable energy systems and technologies. Addresses physical and technical aspects of wind, solar, geothermal, hydro, tidal, biological, and wave energy systems. Consideration is given to engineering, economic, social, environmental, and political factors that determine implementation and sustainability. Credit not allowed for both NRGY 102 and CCS 102.

NRGY 120 - Industrial Safety and Rigging. 3 Credits.
Offered autumn. Offered at Missoula College. This course provides an overview of safe industrial practices and provides students with hands-on experiences in rigging for a variety of industries. Students will complete the requirements for an OSHA 30 certification, construct a scaffold system, identify equipment for shifting heavy loads such as may be used in the wind and solar industries. Load security, fall gear, arrest equipment, confined spaces, safety data sheets will be covered. Students will also learn elements of first aid, cardio-pulmonary resuscitation (CPR), and proper use of Automated External Defibrillators (AED's).

NRGY 191 - Special Topics. 1-3 Credits.
(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRGY 192 - Independent Study. 1-6 Credits.
(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 195 - Practicum. 2 Credits.
Offered summer. Offered at Missoula College. Prereq., NRGY 101, M 121 or consent of instructor. 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.

NRGY 196 - Independent Study. 1-6 Credits.
(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 243 - Fundamentals of Photovoltaic Design & Installation. 3 Credits.
Offered spring. Offered at Missoula College. Prereq., M 121, Prereq./Co-req., ETEC 105. An introduction to the fundamental principles and technologies of solar photovoltaic energy systems. Emphasis on system design and installation, including site and resource assessment, load analysis, troubleshooting, and cost analysis. The material covered prepares students for a career in renewable energy or for installing a renewable energy system on their own home.

NRGY 244 - Bioenergy. 3 Credits.
Offered spring. Offered at Missoula College. Prereqs., SCN 175N, M 121 and NRGY 102, or consent of instructor. Investigates the physical nature of various biorenewable resources and the technologies currently employed to produce, harvest, refine and convert these into useable energy, feedstocks and products.

NRGY 245 - Fuel Cells. 3 Credits.
Offered spring. Offered at Missoula College. Prereq., NRGY 101, M 121. An introduction to the different types of fuel cells (hydrogen, biological, metal/air, proton exchange membrane, etc.) accompanied by a critical examination of their applications, operation, efficiencies, advantages and disadvantages. Students must purchase a fuel cell kit for a laboratory component.

NRGY 250 - Energy Finance. 3 Credits.
Offered summer. Offered at Missoula College. An introduction to the terminology, policies, and mathematical models for financing energy technology projects. Concepts covered include time value of money, tax code, triple bottom line, and cost-benefit analysis. Microsoft Excel will be used.

NRGY 290 - Undergraduate Research. 1-10 Credits.
Offered every term. Offered at Missoula College. Preq., consent of instr. Independent research under the direction of a faculty member.

NRGY 291 - Special Topics. 1-4 Credits.
(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of Energy Technology faculty and visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRGY 292 - Independent Study. 1-9 Credits.
(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 295 - Practicum. 2 Credits.
Offered at Missoula College. 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.

NRGY 298 - Internship. 2 Credits.
Offered every term. Prereq., M 121 and consent of instructor. Same as CCS 298. Extended classroom experience providing practical application of classroom learning through on the job training in a student’s field of study. This experience increases student skills, prepares them for initial employment, and increases occupational awareness and professionalism.

NRGY 299 - Energy Technology Capstone. 3 Credits.
(R-9) Offered spring and autumn. Offered at Missoula College. Students participate in an energy technology design, building, testing, and competition. Previous examples include participation in the Shell EcoMarathon and the American Society of Mechanical Engineering Human Powered Vehicle Challenge. This course is very time intensive and will require meetings outside of regularly scheduled class times. Travel to competition is strongly encouraged, but not required.