



**B.S. IN INTEGRATED ENERGY MANAGEMENT**

Integrated Energy Management at CWU is a four-year Bachelor of Science degree program developed in collaboration with energy industry employers in order to understand the transition of energy landscapes, from traditional to renewable, through an interdisciplinary lens. Through this innovative new interdisciplinary program that focuses on hands-on learning and community-based research experiences, our students graduate with the valuable skills and experience they need to shape the future of energy via exciting new career opportunities.

**INTEGRATED ENERGY MANAGEMENT CORE CLASSES**

**Integrated Energy Management Foundational Courses 28 Credit Hours** **Credits**

ECON 201 Principles of Economics Micro	5
GEOG 250 – Resource Exploitation and Conservation	4
GEOG 107 – Our Dynamic Earth	5
GEOG 301 – Introduction to GIS and Maps	4

*Select one from the following:*

ECON 130 - Foundations for Business Analytics	5
MATH 130 - Finite Mathematics	5

*Select one from the following:*

MATH 153 - Pre-calculus Mathematics I	5
MATH 154 - Pre-calculus Mathematics II	5
MATH 170 - Intuitive Calculus	5
MATH 172 - Calculus I	5

**Integrated Energy Management Core Courses 39-40 Credit Hours** **Credits**

ECON 463 - Energy Economics	5
IEM 301- Energy Management 5	
IEM 302 – Energy, Environment, & Climate Change	4
IEM 310 – Inquiry Science in Energy Management	5
IEM 330 – Geopolitics of Fossil Fuels	4
GEOG 442 - Alternative Energy	5
IEM 489 – Integrated Energy Management Capstone	2

**Choose one methods and one communication course**

**Methods** *(select one from the following list of courses)*

BUS 221 - Introductory Business Statistics	5
MATH 311 - Statistical Concepts and Methods	5
PSY 362 - Introductory Statistics	5

**Communications** *(select one from the following list of courses)*

ADMG 385 - Business Communications and Report Writing	5
COM 345 - Business and Professional Speaking	4
ENG 310 - Technical Writing	4



**SPECIALIZATION IN INTEGRATED ENERGY SYSTEMS**

**CHOOSE THIS TRACK IF:**

You're one of those people who likes to understand exactly how something works...so you can make it work faster, better, smarter. You take a systems-oriented approach to problem solving, and you are constantly looking for ways to increase efficiency and effectiveness.

**POTENTIAL JOB TITLES:**

Systems Analyst, Energy Efficiency Manager, Compliance Specialist

**INTEGRATED ENERGY SYSTEMS COURSES**

**Systems Specialization Required Courses** *18 Credit Hours*

**Credits**

ETSC 101 - Modern Technology and Energy	5
ETSC 160 - Computer-aided Design and Drafting OR	4
ETSC 161 - Architectural Computer Aided Design	4
ETSC 301 - Engineering Project Cost Analysis	4
PHYS 106 - Physics Inquiry	5

**Systems Specialization Electives** *18-20 Credit Hours (Select 18-20 credits from the following courses)*

IT 258 - Spreadsheet app OR IT 268 - Database app	3
CMGT 245 - Light Commercial Construction	5
CMGT 265 - Blueprint Reading and Construction Graphics	4
CMGT 320 - Electrical Systems Design	3
CMGT 452 - LEED in Sustainable Construction	4
EET 221 - Basic Electricity	5
EET 332 - Generation of Electrical Power	4
EET 433 - Transmission and Distribution of Electrical Power	4
ETSC 380 - Quality Control	4
ETSC 455 - Engineering Project Management	4
ETSC 385 - Product Design and Development	4
SHM 301 - Fundamentals of Safety and Health Management	3
SHM 325 - Manufacturing Safety and Health	3
SHM 351 - Incident Analysis	3
SHM 353 - Risk and Insurance	4
SHM 377 - Hazardous Materials Management	4
SHM 477 - Environmental Management	4
IEM 290 - Cooperative Education	1 - 10
IEM 490 - Cooperative Education	1 - 12

**TOTAL CREDITS 103-106**