

BACHELOR DEGREE IN INTEGRATED ENERGY MANAGEMENT @CWU

INTEGRATED POWER SYSTEMS SPECIALIZATION – AY 2016/17

Power Systems provides courses that train students in topics related to energy technologies, physical understandings of power systems, and the environmental implications of energy production, distribution, and consumption.

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

Course Description Credits

Select one from the following:

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

AND

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 Managers	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)

	<u>Credit</u>
BUS 221 - Introductory Business Statistics	5
MATH 311 - Statistical Concepts and Methods	5
PSY 362 - Introductory Statistics	5

AND

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

	<u>Credit</u>
ADMG 385 - Business Communications and Report Writing	5
COM 345 - Business and Professional Speaking	4
ENG 310 - Technical Writing	4

Turn this page over to view required and elective classes for the Power Systems Specialization ➔

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	<u>Credits</u>
Power Systems Specialization <u>Required</u> Courses	18
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

Power Systems Specialization <u>Electives</u>	18-20
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Select between 18 and 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



A BACHELORS DEGREE PROGRAM DEVELOPED BY COMPANIES
 FOCUSED ON UNDERSTANDING THE TRANSITION OF ENERGY
 LANDSCAPES, TRADITIONAL AND RENEWABLE, THROUGH AN
 INTERDISCIPLINARY LENS; AND ARMING STUDENTS WITH THE
 SKILL SET TO MEET THE DEMAND FOR QUALIFIED WORKERS
 SERVING THE BUSINESS AND MANAGEMENT SIDE OF PUBLIC AND
 PRIVATE ORGANIZATIONS IN THE ENERGY SECTOR

ACCEPTING PRE-MAJORS/MAJORS FOR FALL 2016