Renewable Energy Technology A.A.S. (#2098) – Typical Schedule

Year 1

Fall Semester
RENG 101 Electrical Theory for Renewable Resources (4 cr.)
RENG 102 Renewable Energy Resources (3 cr.)
RENG 103 Renewable Energy Seminar (1 cr.)
MATH (as advised) (3 cr.)
COMP 101 Composition and Research (3 cr.)
NATR 103 Natural Resources Equipment Operation* (2 cr.)

Spring Semester
RENG 150 Analysis Techniques for Renewable Energy (1 cr.)
AGEN 151 Applied Hydraulics for Hydropower Generation (3 cr.)
AGEN 125 Residential Electrification (3 cr.)
CHEM 110 Contemporary Chemistry (4 cr.)
COMP 102 Writing about Literature (3 cr.)
OFFT 110 Intro to Spreadsheet Software (1 cr.)

Year 2

Fall Semester
RENG 310 Biomass Energy Resources (3 cr.)
RENG 231 Introduction to Solar Photovoltaics (3 cr.)
PHYS 107 Introduction to Physics (4 cr.)
RESC 221 Plumbing* (3 cr.)
RESC 130 Light Framing* (3 cr.)

Spring Semester
NATR 213 Basics of Geospatial Technology (1 cr.)
RENG 221 Introduction to Small Wind Systems (3 cr.)
AUTO 102 Metals* (3 cr.)
CITA 140 Introduction to Programming* (3 cr.)
HIST, WC, OW History (as advised) (3 cr.)
RESC 260 Heating and Energy Systems* (3 cr.)

*Recommended Technical Electives:
AUTO 102 Metals (welding)
AGEN 240 Advanced Welding
BSAD 100 Business in the 21st century
BSAD 112 Marketing
BSAD 116 Business and Organization Management
CITA 140 Introduction to Programming
ECON 100 Intro. To Macroeconomics
ECON 140 Intro. To Microeconomics
NATR 103 Natural Resources Equipment Operation
RENG 225 Tower Climbing and Rescue
RESC 130 Light Framing
RESC 201 Estimating & Planning
RESC 221 Plumbing
RESC 260 Heating and Energy Systems
Year 1

**Fall Semester**
- RENG 101  Electrical Theory for Renewable Resources (4 cr.)
- RENG 102  Renewable Energy Resources (3 cr.)
- RENG 103  Renewable Energy Seminar (1 cr.)
- MATH  (as advised) (3 cr.)
- COMP 101  Composition and Research (3 cr.)
- OFFT 110  Intro to Spreadsheet Software (1 cr.)

**Spring Semester**
- RENG 150  Analysis Techniques for Renewable Energy (1 cr.)
- AGEN 151  Applied Hydraulics for Hydropower Generation (3 cr.)
- AGEN 125  Residential Electrification (3 cr.)
- NS  Nat. Science (as advised, e.g. CHEM 110) (4 cr.)
- COMP 102  Writing about Literature (3 cr.)
- Elective*  Lower division elective (e.g. NATR 103) (2 cr.)

**Year 2**

**Fall Semester**
- RENG 310  Biomass Energy Resources (3 cr.)
- RENG 231  Introduction to Solar Photovoltaics (3 cr.)
- NS  Nat. Science (as advised, e.g. PHYS 127) (4 cr.)
- Gen Ed  As advised (e.g. social science) (3 cr.)
- Elective*  Lower division elective (e.g. RESC 221) (3 cr.)

**Spring Semester**
- CAD 181  Intro to Computer-Aided Drafting (1 cr.)
- RENG 221  Introduction to Small Wind Systems (3 cr.)
- NS  Nat Sci. (as advised, e.g. BIOL 120) (4 cr.)
- Elective*  Lower division elective (e.g. RENG 225) (2 cr.)
- Gen Ed  As advised (e.g. HIST) (3 cr.)
- Elective*  Lower division elective (e.g. AUTO 102) (3 cr.)

**Year 3**

**Fall Semester**
- RENG 430  Solar Photovoltaics Systems (3 cr.)
- RENG 331  Intro to Solar Thermal Systems (3 cr.)
- Gen Ed  As advised (e.g. Western Civilization) (3 cr.)
- DTEC 325  Electrical Power Generation (3 cr.)
- Elective  Elective (e.g. BSAD 300) (3 cr.)

**Spring Semester**
- RENG 415  Biomass Energy Conversions – Thermochem (3 cr.)
- RENG 435  Advanced Topics in Solar Photovoltaics (3 cr.)
- RENG 306  Alternative Fuel Vehicles (2 cr.)
- Elective*  Elective (e.g. COMP 310) (3 cr.)
- Elective*  Elective (e.g. BSAD 400) (3 cr.)
Year 4
RENG 321 Intro to Micro Hydroelectricity (3 cr.)
RREN 450 Internship Orientation (1 cr.)
RENG 490 Renewable Energy Internship (3 -15 cr.)

Spring Semester
RENG 460 Systems Integration (1 cr.)
RENG 410 Biomass Energy Conversions – Biochemical (3 cr.)
RENG 420 Small Wind Systems (3 cr.)
Elective* Upper division elective (e.g. RREN 332) (3 cr.)
Elective* Elective (e.g. CITA 405) (3 cr.)

*Recommended Technical Electives (as Advised)

Lower division
AGRO 110 Soil Science
AGRO 210 Field Crops
AUTO 102 Metals (welding)
AGEN 161 Basic Hydraulics
BSAD 116 Business and Organization Management
CAD 181 Intro to CAD
CAD 183 Architectural CAD
CITA 120 Computer Concepts and Operating Systems
CITA 140 Introduction to Programming
CITA 200 Data Communications and Networking
DTEC 150 Diesel Systems
ENSC 101 Agricultural Science
ENSC 106 Pesticide Use and Handling
ENSC 107 Integrated Pest Management
MECH 101 Machine Tools
MECH 211 Analytical Mechanics (Statics)
NATR 103 Natural Resources Equipment Operation
NATR 213 Basics of Geospatial Technology
RENG 225 Tower Climbing and Rescue
RENG 251 Anaerobic Digester Design and Operation
RESC 130 Light Framing
RESC 221 Plumbing
RESC 260 Heating and Energy Systems

Upper Division
AGRO 310 Pasture Mgmt. and Forage Production
BSAD 300 Management Communications
BSAD 310 Human Resources Management
BSAD 320 Accounting for Entrepreneurs
BSAD 400 Production and Operations Management
CITA 405 Project Management
DTEC 325 Electrical Power Generation
RENG 306 Alternative Fuel Vehicles
RREN 303 Fundamentals of GPS/GIS
RREN 305 Renewable Resources Laws & Regulations
RREN 332 Environ. Planning and Nat. Res. Mgmt.
STS 301 Humans vs. Nature